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=> fil reg; d ide l2
FILE 'REGISTRY' ENTERED AT 14:19:47 ON 12 JUN 2009
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STRUCTURE FILE UPDATES:   10 JUN 2009  HIGHEST RN 1155458-91-5
DICTIONARY FILE UPDATES:  10 JUN 2009  HIGHEST RN 1155458-91-5

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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http://www.cas.org/support/stngen/stndoc/properties.html



L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   106566-58-9  REGISTRY
ED   Entered STN:  14 Feb 1987
CN   Tellurate(1-), trichloro[1,2-ethanediolato(2-)-κO1,κO2]-,
     ammonium (1:1), (SP-5-22)-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   1,2-Ethanediol, tellurium complex
CN   Tellurate(1-), trichloro[1,2-ethanediolato(2-)-O,O']-, ammonium,
     (SP-5-22)-
OTHER NAMES:
CN   AS 101
CN   AS 101 (pharmaceutical)
CN   Ossirene
MF   C2 H4 Cl3 O2 Te . H4 N
CI   CCS
SR   CA
LC   STN Files:   ADISINSIGHT, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS,
       CASREACT, CHEMCATS, CIN, DDFU, DRUGU, EMBASE, IMSDRUGNEWS, IMSRESEARCH,
       IPA, PHAR, PROMT, PROUSDDR, RTECS*, SYNTHLINE, TOXCENTER, USPAT2,
       USPATFULL
         (*File contains numerically searchable property data)
CRN  (77593-49-8)
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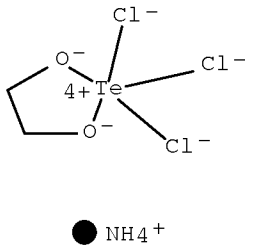


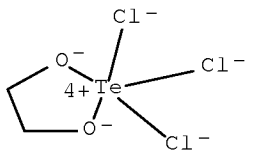
95 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
95 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> => d ide

L81 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 77593-50-1 REGISTRY
ED Entered STN: 16 Nov 1984
CN Phosphonium, tetraphenyl-, (SP-5-22)-trichloro[1,2-ethanediolato(2-)-κO,κO']tellurate(1-) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Ethanediol, tellurium complex
CN Phosphonium, tetraphenyl-, (SP-5-22)-trichloro[1,2-ethanediolato(2-)-O,O']tellurate(1-)
CN Tellurate(1-), trichloro[1,2-ethanediolato(2-)-O,O']-, (SP-5-22)-, tetraphenylphosphonium
MF C24 H20 P . C2 H4 Cl3 O2 Te
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

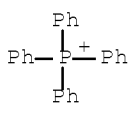
CM 1

CRN 77593-49-8
CMF C2 H4 Cl3 O2 Te SIMILAR COMPOUND
CCI CCS



CM 2

CRN 18198-39-5
CMF C24 H20 P



10 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

INVENTOR SEARCH

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=> => fil capl; d que l23; fil uspatf; d que l48
FILE 'CAPLUS' ENTERED AT 14:44:28 ON 12 JUN 2009
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FILE COVERS 1907 - 12 Jun 2009  VOL 150 ISS 25
FILE LAST UPDATED: 11 Jun 2009  (20090611/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Feb 2009

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE


L3             4 SEA FILE=REGISTRY SPE=ON  ABB=ON  77593-49-8/CRN
L5            97 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L3
L7             1 SEA FILE=HCAPLUS SPE=ON  ABB=ON  US2006-560232/AP
L8         41895 SEA FILE=HCAPLUS SPE=ON  ABB=ON  OBESITY/CT
L9         48960 SEA FILE=HCAPLUS SPE=ON  ABB=ON  ADIPOSE TISSUE/CT
L10        12208 SEA FILE=HCAPLUS SPE=ON  ABB=ON  ANTIOBESITY AGENTS/CT
L11        21483 SEA FILE=HCAPLUS SPE=ON  ABB=ON  APPETITE/CW
L12        35305 SEA FILE=HCAPLUS SPE=ON  ABB=ON  BODY WEIGHT/CT
L13         1627 SEA FILE=HCAPLUS SPE=ON  ABB=ON  ADIPOSITY/OBI OR CORPULEN?/OBI

L18          814 SEA FILE=HCAPLUS SPE=ON  ABB=ON  RUBINSTEIN M?/AU
L19           10 SEA FILE=HCAPLUS SPE=ON  ABB=ON  DAGON Y?/AU
L20          129 SEA FILE=HCAPLUS SPE=ON  ABB=ON  SREDNI B?/AU
L21          127 SEA FILE=HCAPLUS SPE=ON  ABB=ON  ALBECK M?/AU
L23            1 SEA FILE=HCAPLUS SPE=ON  ABB=ON  (L7 OR L18 OR L19 OR L20 OR
                 L21) AND L5 AND (L8 OR L9 OR L10 OR L11 OR L12 OR L13)



FILE 'USPATFULL' ENTERED AT 14:44:29 ON 12 JUN 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 11 Jun 2009 (20090611/PD)
FILE LAST UPDATED: 11 Jun 2009 (20090611/ED)
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HIGHEST GRANTED PATENT NUMBER: US7546642
HIGHEST APPLICATION PUBLICATION NUMBER: US20090151035
CA INDEXING IS CURRENT THROUGH 11 Jun 2009 (20090611/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 11 Jun 2009 (20090611/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

USPATFULL now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.


L3             4 SEA FILE=REGISTRY SPE=ON  ABB=ON  77593-49-8/CRN
L35           30 SEA FILE=USPATFULL SPE=ON  ABB=ON  L3
L36           69 SEA FILE=USPATFULL SPE=ON  ABB=ON  RUBINSTEIN M?/AU
L37            1 SEA FILE=USPATFULL SPE=ON  ABB=ON  DAGON Y?/AU
L38           27 SEA FILE=USPATFULL SPE=ON  ABB=ON  SREDNI B?/AU
L39           33 SEA FILE=USPATFULL SPE=ON  ABB=ON  ALBECK M?/AU
L41        35373 SEA FILE=USPATFULL SPE=ON  ABB=ON  OBES? OR ANTIOBES?
L42        15947 SEA FILE=USPATFULL SPE=ON  ABB=ON  APPETITE
L43        15534 SEA FILE=USPATFULL SPE=ON  ABB=ON  ADIPOS?
L44          332 SEA FILE=USPATFULL SPE=ON  ABB=ON  CORPULEN?
L45       148890 SEA FILE=USPATFULL SPE=ON  ABB=ON  (BODY OR CONTROL)(2A)
                 WEIGHT
L46         6213 SEA FILE=USPATFULL SPE=ON  ABB=ON  OVERWEIGHT
L48           21 SEA FILE=USPATFULL SPE=ON  ABB=ON  L35 AND (L41 OR L42 OR L43
                 OR L44 OR L45 OR L46) AND (L36 OR L37 OR L38 OR L39)


=> dup rem l23,148
FILE 'HCAPLUS' ENTERED AT 14:44:38 ON 12 JUN 2009
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FILE 'USPATFULL' ENTERED AT 14:44:38 ON 12 JUN 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)
PROCESSING COMPLETED FOR L23
PROCESSING COMPLETED FOR L48
L80           22 DUP REM L23 L48 (0 DUPLICATES REMOVED)
                 ANSWER '1' FROM FILE HCAPLUS
                 ANSWERS '2-22' FROM FILE USPATFULL

=> d ibib abs hitind 1; d ibib abs kwic 2-22

L80  ANSWER 1 OF 22  HCAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2004:1124556  HCAPLUS  Full-text
DOCUMENT NUMBER:          142:49248
TITLE:                    Methods of treating obesity and related disorders
                          using tellurium and selenium compounds
INVENTOR(S):              Rubinstein, Menachem; Dagon, Yossi
PATENT ASSIGNEE(S):       Israel
SOURCE:                   PCT Int. Appl., 39 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE         APPLICATION NO.         DATE
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WO 2004110338 A2 20041223 WO 2004-IL506 20040613
WO 2004110338 A3 20050331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2004246895 A1 20041223 AU 2004-246895 20040613
CA 2530634 A1 20041223 CA 2004-2530634 20040613
EP 1631272 A2 20060308 EP 2004-736726 20040613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
IN 2006CN00112 A 20070518 IN 2006-CN112 20060110
US 20060166957 A1 20060727 US 2006-560232 20060324 <--
PRIORITY APPLN. INFO.: US 2003-477790P P 20030612
WO 2004-IL506 W 20040613

OTHER SOURCE(S): MARPAT 142:49248

AB The invention discloses methods of using tellurium- and selenium-containing compds., and particularly to the use of small organic mols. containing tellurium or selenium, e.g. ammonium trichloro(dioxoethylene-O,O')tellurate (AS101) for treating obesity and obesity-related disorders or complications and for reducing of food intake.

IC ICM A61K
CC 1-11 (Pharmacology)
IT Adipose tissue
Cell differentiation
Cell differentiation
(adipocyte; tellurium and selenium compds. for treatment of obesity and related disorders)
IT Adipose tissue
(preadipocyte; tellurium and selenium compds. for treatment of obesity and related disorders)
IT Antiarthritics
Antidiabetic agents
Antihypertensives
Antiobesity agents
Appetite depressants
Cardiovascular agents
Cardiovascular system, disease
Digestive tract, disease
Drug delivery systems
Eating disorders
Gastrointestinal agents
Human
Hyperglycemia
Hypertension
Hypolipemic agents
Obesity
Osteoarthritis
Respiratory system, disease
Sleep apnea
(tellurium and selenium compds. for treatment of obesity and related disorders)
IT 106566-58-9, As101

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tellurium and selenium compds. for treatment of obesity and related disorders)

IT 7446-07-3, Tellurium dioxide 7782-49-2D, Selenium, compds. 13494-80-9D, Tellurium, compds. 29510-67-6 77593-50-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tellurium and selenium compds. for treatment of obesity and related disorders)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 2 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2009:59927 USPATFULL Full-text
TITLE: Biologically active complex
INVENTOR(S): Albeck, Michael, Ramat-Gan, ISRAEL
Sredni, Benjamin, Kfar-Saba, ISRAEL
PATENT ASSIGNEE(S): BioMAS Ltd., Tel-Aviv, ISRAEL (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20090054391	A1	20090226
APPLICATION INFO.:	US 2007-898290	A1	20070911 (11)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2004-496729, filed on 21 May 2004, Pat. No. US 7276628 A 371 of International Ser. No. WO 2002-IL936, filed on 24 Nov 2002

	NUMBER	DATE
PRIORITY INFORMATION:	IL 2001-146694	20011122

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MARTIN D. MOYNIHAN d/b/a PRTSI, INC., P.O. BOX 16446, ARLINGTON, VA, 22215, US
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1-12
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 991
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to an aqueous solution containing at least one species selected from the group consisting of a 1:1 molar complex of TeO.sub.2 with a moiety of formula (A) and ammonium salts thereof: HO--X--OH (A); where X is an optionally substituted divalent saturated hydrocarbon group containing 2-8 carbon atoms in the chain connecting the two OH groups; and its use for stimulating cells to produce cytokines and for treating mammalian diseases and conditions responsive to increased production of cytokines. The complex may be used also for treating mammalian cancer which is not responsive to increased production of cytokines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Albeck, Michael, Ramat-Gan, ISRAEL
IN Sredni, Benjamin, Kfar-Saba, ISRAEL
DETD . . . the form of aqueous solutions, used to stimulate lymphokine production or treat the specific disease condition described herein, may be varied depending on the particular disease and the stage of the

disease. Generally an amount of the complex may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokines production but the dosage may be adjusted according to the individual response and the particular condition that is being treated.

DETD . . . be used in treating the mammalian disorders described hereinabove. For in vitro use, cells may be stimulated to produce lymphokines by use of 1+10.sup.-8 to 1+10.sup.-4, preferably 1+10.sup.-7 to 1+10.sup.-5 g of complex per 10.sup.6 cells/ml. Preliminary toxicity studies in mice have established an LD.sub.50 of 300 μg/25 g of body weight in 6 week old mice for the complex of Example 1. The complexes may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the complex of the Example 1 at a dose of 10. . .

IT 106444-33-1P 106566-58-9P
(cytokine-inducing tellurium complex Biol. active complex)

L80 ANSWER 3 OF 22 USPATFULL on STN

ACCESSION NUMBER:	2008:17518 USPATFULL Full-text
TITLE:	Novel Tellurium Compounds and Their Use as Immunomodulators
INVENTOR(S):	Albeck, Michael, Ramat-Gan, ISRAEL Sredni, Benjamin, Kfar-Saba, ISRAEL
PATENT ASSIGNEE(S):	BioMAS LTD, Tel Aviv, ISRAEL (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20080015175	A1	20080117	
APPLICATION INFO.:	US 2005-663031	A1	20050915	(11)
	WO 2005-IL989		20050915	
			20070316	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-610660P	20040917 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Martin D Moynihan, Prtsi Inc, PO BOX 16446, Arlington, VA, 22215, US
NUMBER OF CLAIMS:	27
EXEMPLARY CLAIM:	1-21
NUMBER OF DRAWINGS:	5 Drawing Page(s)
LINE COUNT:	1621

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel tellurium-containing compounds and uses thereof as immunomodulators are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Albeck, Michael, Ramat-Gan, ISRAEL

IN Sredni, Benjamin, Kfar-Saba, ISRAEL

SUMM . . . 2001), trauma (surgery) (Blood 87: 2095-2147, 1996), ischemic diseases (myocardial infarction) (Acta. Univ. Palacki. Olomuc., Fac. Med. 143: 19-29, 2000; Cell. Immunol 184: 12, 1998), Alzheimer's disease (Blood 87: 2095-2147, 1996), liver diseases (Immunol. Rev. 174: 192-209, 2000), rheumatoid arthritis (Arthritis Rheum. 44: 275, 2001; J.

Rheumatol. 28: 1779, 2001), obesity (Shock 14: 253, 2000), psoriasis (Arch. Dermatol. Res. 293: 334, 2001), and sepsis (Acta. Univ. Palacki. Olomuc., Fac. Med. 143: 19-29, 2000; Blood 87: 2095-2147, 1996; Shock 16: 441, 2000; J. Med. 31: 15, 2000).

SUMM . . . HUV-related encephalitis, aging, neurological damage due to stroke, traumatic brain injury, spinal cord injury, yellow fever, dengue fever, Japanese encephalitis, liver disease, renal disease, polycystic kidney disease, H. pylori-associated gastric and duodenal ulcer disease, HIV infection, tuberculosis, an immunotherapy for the treatment of various forms of cancer, organ failure, meningitis, obesity and related diseases, diabetes, hyperglycemia, hyperinsulinemia and a complication associated with coronary artery bypass grafts.

SUMM According to still further features in the described preferred embodiments, the compound of formula I may be used in treating or preventing obesity and related disorders, by administering to a subject in need thereof a therapeutically effective amount. The route of administration may be, for example, by the oral, parenteral, rectal, nasal, topical and inhalation routes.

SUMM The carrier may optionally further comprise an additional active agent, such as, for example, an antibiotic agent, an anti-diabetic agent, an antihyperglemic agent, an antimicrobial agent, an anti-obesity agent, an anesthetic agent, an anti-oxidant, a chemotherapeutic agent, an antidepressant, an anti-histamine, a vitamin, and a hormone.

DETD . . . in various therapeutic applications such as, but not limited to treatment of an interleukin-1β-converting enzyme-mediated condition, an IL-1 mediated disease, an inflammatory disease, an autoimmune disease, an ischemic disease, a destructive bone disorder, a proliferative disorder, an infectious disease, a neurodegenerative disease, a disease associated with cell death, diabetes and obesity and related diseases.

DETD The present invention further provides a method of treating or preventing obesity, comprising administering a therapeutically effective amount of the compound of Formula I.

DETD The effect of the compound of Example 1 was investigated in vivo, on body and fat composition in mice under standard diet. Mice treated with the compound of Example 1 every other day for 10 weeks gained significantly less body weight than untreated mice under a standard diet (see, FIG. 6).

DETD In summary, the novel compounds described herein are useful for treating obesity, and related diseases (e.g., diabetes).

DETD The compounds of the invention may be administered orally, alone for the treatment of obesity and/or type 2 diabetes or in combination with insulin or other antihyperglycemic drugs such as thiazolidinedione derivatives. If administered in combination with insulin, it may be possible to reduce the patients normal dose of insulin. For example, EP 749751 (which is incorporated herein by reference) teaches pharmaceutical compositions comprising an. . .

DETD Hence, exemplary additional active agents according to this embodiment of present invention include, without limitation, one or more, or any combination of an antibiotic agent, an anti-diabetic agent, an antihyperglemic agent, an antimicrobial agent, an anti-obesity agent, an anesthetic agent, a suitable anti-oxidant, a chemotherapeutic agent, an antidepressant, an anti-histamine, a vitamin, and a hormone.

DETD Female ob/ob mice 7 weeks old were injected intraperitoneally (ip) with SAS (10 μg/ml in PBS) every other day. Control animals were injected every other day with PBS. Body weight was monitored on a daily basis.

CLM What is claimed is:

. . . HIV-related encephalitis, aging, neurological damage due to stroke, traumatic brain injury, spinal cord injury, yellow fever, dengue fever,

Japanese encephalitis, liver disease, renal disease, polycystic kidney disease, H. pylori-associated gastric and duodenal ulcer disease, HIV infection, tuberculosis, an immunotherapy for the treatment of various forms of cancer, organ failure, meningitis, obesity and related diseases, diabetes, hyperglycemia, hyperinsulinemia and a complication associated with coronary artery bypass grafts.

CLM What is claimed is:
33. A method of treating or preventing obesity and related disorders, the method comprising administering to a subject in need thereof a therapeutically effective amount of the compound of claim 22.

CLM What is claimed is:
43. The method of claim 42, wherein said additional active agent is selected from the group consisting of an antibiotic agent, an anti-diabetic agent, an antihyperglemic agent, an antimicrobial agent, an anti-obesity agent, an anesthetic agent, an anti-oxidant, a chemotherapeutic agent, an antidepressant, an anti-histamine, a vitamin, and a hormone.

CLM What is claimed is:
47. The method of claim 46, wherein said additional active agent is selected from the group consisting of an antibiotic agent, an anti-diabetic agent, an antihyperglemic agent, an antimicrobial agent, an anti-obesity agent, an anesthetic agent, an anti-oxidant, a chemotherapeutic agent, an antidepressant, an anti-histamine, a vitamin, and a hormone.

IT 106566-58-9, AS 101 879282-17-4, SAS
(adjuvant activity of)

L80 ANSWER 4 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2007:341128 USPATFULL Full-text
TITLE: Use of Tellurium Compounds for Inhibiton of Interleukin-Converting Enzyme
INVENTOR(S): Albeck, Michael, Ramat-Gan, ISRAEL
Sredni, Benjamin, Kfar-Saba, ISRAEL
PATENT ASSIGNEE(S): BioMAS Ltd., Tel-Aviv, ISRAEL, 69710 (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20070298124	A1	20071227	
APPLICATION INFO.:	US 2005-663032	A1	20050915	(11)
	WO 2005-IL990		20050915	
			20070316	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-610660P	20040917 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Martin D Moynihan, Prtsi Inc, P O BOX, Arlington, VA, 22215, US
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1-20
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 1990
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Use of tellurium-containing compounds for treating conditions in which inhibition of caspase-1/interleuFkin-1β enzyme (ICE) is beneficial is disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Albeck, Michael, Ramat-Gan, ISRAEL
IN Sredni, Benjamin, Kfar-Saba, ISRAEL
SUMM . . . 2001), trauma (surgery) (Blood 87: 2095-2147, 1996), ischemic diseases (myocardial infarction) (Acta. Univ. Palacki. Olomuc., Fac. Med. 143: 19-29, 2000; Cell. Immunol. 184: 12, 1998), Alzheimer's disease (Blood 87: 2095-2147, 1996), liver diseases (Immunol. Rev. 174: 192-209, 2000), rheumatoid arthritis (Arthritis Rheum. 44: 275, 2001; J. Rheumatol. 28: 1779, 2001), obesity (Shock 14: 253, 2000), psoriasis (Arch. Dermatol. Res. 293: 334, 2001), and sepsis (Acta. Univ. Palacki. Olomuc., Fac. Med. 143: 19-29, 2000; Blood 87: 2095-2147, 1996; Shock 16: 441, 2000; J. Med. 31: 15, 2000).
IT 106566-58-9, AS 101 879282-17-4, SAS
(adjuvant activity of)

L80 ANSWER 5 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2006:196201 USPATFULL Full-text
TITLE: Methods of treating obesity and related disorders using tellurium selenium compounds
INVENTOR(S): Rubinstein, Menachem, Rehovot, ISRAEL
Dagon, Yossi, Rishon-LeZion, ISRAEL
Sredni, Benjamin, Saba, ISRAEL
Albeck, Michael, Ramat-Gan, ISRAEL

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20060166957	A1	20060727	
APPLICATION INFO.:	US 2004-560232	A1	20040613	(10)
	WO 2004-IL506		20040613	
			20060324	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-477790P	20030612 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Martin Moynihan, Prtsi Inc, PO Box 16446, Arlington, VA, 22215, US
NUMBER OF CLAIMS: 46
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 977
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods of using tellurium and selenium containing compounds, and particularly to the use of small organic molecules containing tellurium or selenium as exemplified by the compound ammonium-trichloro(dioxoethylene-O,O')tellurate (known by the abbreviation AS101) for treating obesity and obesity related disorders or complications and for reducing of food intake.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
TI Methods of treating obesity and related disorders using tellurium selenium compounds
IN Rubinstein, Menachem, Rehovot, ISRAEL

IN Dagon, Yossi, Rishon-LeZion, ISRAEL
IN Sredni, Benjamin, Saba, ISRAEL
IN Albeck, Michael, Ramat-Gan, ISRAEL

AB The present invention relates to methods of using tellurium and selenium containing compounds, and particularly to the use of small organic molecules containing tellurium or selenium as exemplified by the compound ammonium-trichloro(dioxoethylene-O,O')tellurate (known by the abbreviation AS101) for treating obesity and obesity related disorders or complications and for reducing of food intake.

SUMM The present invention relates to methods for treating obesity and disorders related to obesity, and for reducing food intake, using tellurium- and selenium-containing compounds. In particular the present invention relates to use of small organic molecules comprising tellurium or selenium, including ammonium trichloro(dioxoethylene-O,O')tellurate (known by the abbreviation AS101) in such methods.

SUMM The term obesity refers to an excess of adipose tissue relative to lean body mass. It is best viewed as any degree of excess adiposity that creates a health risk. The cutoff between normal and obese individuals can only be approximated, but the health risk imparted by obesity is probably a continuum with increasing adiposity. The most common value used to quantify obesity is the body mass index (BMI). BMI is defined as the ratio of a person's weight in kilograms and the square of their height expressed in meters. When a man's BMI is above 27.8, or a woman's exceeds 27.3; that person is considered overweight. The degree of obesity associated with a particular BMI ranges from mild obesity at a BMI near 27, moderate obesity at 30, severe obesity at 35, to very severe obesity at 40 or greater (Weighing the Options: Criteria for Evaluating Weight-Management Programs. Institute of Medicine, National Academy of Sciences. 1995; 50-51).

SUMM Obesity results from a greater consumption of energy than is used by the body. As this energy is stored, fat cells enlarge and increase in number, producing the characteristic pathology of obesity. The genetic makeup of human beings, which reflects a long evolutionary history of relative scarcity of foodstuffs, has run into an age of surfeit, and many people cannot readily adapt. Thus, the increased intake of food does not signal satiety, and there is a gradual increase in energy storage, particularly as intake of energy outpaces need as we grow older. Against this background of basic instincts unsuited to modern life in developed societies, it is possible to identity an increasing number of defects or etiologies that produce obesity. For most patients, however, it is not possible to connect obesity to a specific cause.

SUMM Obesity is associated with important psychological and medical morbidities, the latter including hypertension; dyslipidemia; type 2 diabetes; coronary heart disease; stroke; gallbladder disease; osteoarthritis; sleep apnea and respiratory problems; and endometrial, breast, prostate, and colon cancers. Higher body weights are also associated with increases in all-cause mortality. Obesity has reached epidemic status in the industrialized world. For example, about 97 million adults in the United States are overweight or obese. About 300,000 U.S. deaths a year are associated with obesity and overweight. The total direct and indirect costs attributed to overweight and obesity amounted to $117 billion in 2000. In 1999, an estimated 61 percent of U.S. adults were overweight, along with 13 percent of children and adolescents. Obesity among adults has doubled since 1980, while overweight among adolescents has tripled.

SUMM Treatment of obesity remains a problem. Except for exercise, diet and food restriction, currently there is no convincing pharmacological treatment for effective reduction of body weight. Plain diet usually fails due to poor compliance and when terminated, the patient returns to his pre-diet weight. One approved drug, Orlistat (Xenical), which inhibits lipase enzymes responsible for breaking down ingested fat Thus reduces fat adsorption through the gut, is only poorly effective. Moreover, some side effects with Orlistat. . .

SUMM An alternative pharmacological approach is based on appetite suppressants. Several appetite suppressant medications have been proposed as treatment of obesity. Of these, only one appetite suppressant, sibutramine (Meridia) is approved for clinical use. In general, these medications are modestly effective, leading to an average weight loss of 5 to 22 pounds above that expected with non-drug obesity treatments. People respond differently to appetite suppressant medications, and some people experience more weight loss than others.

SUMM U.S. Pat. Nos. 6,624,161 and 6,656,934 disclose a particular class of benzoxazinone compounds, particularly 2-Oxy-benzoxazinone derivatives and 2-amino-benzoxazinone derivatives that has activity as lipase inhibitors, and are thus useful for the treatment of obesity and obesity-related diseases.

SUMM U.S. Pat. No. 6,476,059 relates to the use of polycyclic 2-aminothiazole systems and of their physiologically tolerated salts and physiologically functional derivatives for producing medicines for the prophylaxis or treatment of obesity.

SUMM Some obese patients using medication lose more than 10 percent of their starting body weight, an amount of weight loss that may reduce risk factors for obesity-related diseases, such as high blood pressure or diabetes. Maximum weight loss usually occurs within 6 months of starting medication treatment. Weight then tends to level off or increase during the remainder of treatment. Studies suggest that if a patient does not lose at least 4 pounds over 4 weeks on. . .

SUMM Some antidepressant medications have been studied as appetite suppressant medications. While these medications are FDA approved for the treatment of depression, their use in weight loss is an "off-label" use. Studies of these medications generally have found that patients lost modest amounts of weight for up to 6 months. However, most studies have found that patients who lost weight while taking antidepressant medications tended to regain weight while they were still on the drug treatment. Amphetamines and closely related compounds are not recommended for use in the treatment of obesity due to their potential for abuse and dependence.

SUMM The ob/ob mouse strain is very well studied as a model of human obesity. These spontaneously generated rodents do not express leptin, which is the adipocyte-generated signal of satiety (Y. Zhang et al., Nature 372, 425, 1994). As a result, ob/ob mice consume food continuously and can double or triple their weight, stored as fat, as compared with normal mice. In addition, ob/ob mice spontaneously develop insulin resistance, which resembles very much that of obese humans. So far, the only known treatment that can reverse the obesity and insulin resistance of ob/ob mice is exogenous leptin, administered by injection (M. A. Pelleymounter et al., Science 269, 540, 1995; J. L. Halaas et al., Science 269, 543, 1995; L. A. Campfield, et al, Science 269, 546, 1995). Of the currently approved anti obesity drugs, none has any significant effect on ob/ob mice. Clearly, any agent that can reverse the obese phenotype of ob/ob mice is a candidate for control of human obesity.

SUMM The present invention relates to novel uses of tellurium- and selenium-containing compounds for treatment of obesity and obesity related disorders or complications, including insulin resistance and type 2 diabetes. More particularly, the present invention provides methods of treating obesity and its associated complications by administering to an individual in need thereof a pharmaceutical composition comprising a therapeutically effective amount of a tellurium- or selenium-containing organic compound.

SUMM According to one aspect, the present invention provides a method of treating obesity comprising administering to an individual in need thereof a pharmaceutical composition comprising a therapeutically effective amount of a compound according to any one of formulae (I)-(VI): ##STR1## TeO.sub.2 (III) PhTeCl.sub.3 (IV) (C.sub.6H.sub.5).sup.+P(TeCl.sub.3(O.sub.2C.sub.2H.sub.4)).sup.- (V) ##STR2##

SUMM The present invention now discloses that surprisingly, compounds containing tellurium or selenium according to any one of formulae (I) to (VI) are effective in the treatment and/or prevention of obesity and obesity related disorders.

SUMM According to another aspect, the present invention provides a method of treating obesity related disorders comprising administering to an individual in need thereof a pharmaceutical composition comprising a therapeutically effective amount of a compound having any one of formulae (I) to (VI) as described herein above.

SUMM According to one embodiment, the obesity-related disorder is selected from the group consisting of insulin resistance, hypertension, dyslipidemia, hyperlipidemia, cardiovascular disease, stroke, gastrointestinal disease, gastrointestinal conditions, osteoarthritis, sleep apnea and respiratory problems, and eating disorders.

SUMM The present invention is based in part on the unexpected observation that administration of AS101 to ob/ob mice either by parenteral injection or orally in their drinking water, significantly reduced their food intake and body weight. In addition, AS101 treatment significantly reduced the blood glucose of the insulin-resistant ob/ob mice. Similarly, administration of AS101 to normal mice fed with a high fat diet significantly reduced their body weight. Thus, AS101, analogs thereof and pharmaceutical compositions comprising same are effective medicaments for reducing obesity and its associated complications.

DETD The present invention provides novel use of small organic molecules comprising tellurium or selenium for the treatment of obesity in humans and other mammalian species.

DETD According to certain embodiments the present invention provides methods of treating obesity and obesity related disorders or complications, and of reducing food intake, comprising administering to an individual in need thereof a pharmaceutical composition comprising a therapeutically effective amount of a selenium- or tellurium-containing compound.

DETD The compounds described above, specifically AS101 are used in the treatment of obesity. As used herein, the term "treatment" or "treating" is intended to include the administration of any one of the compounds of the invention to a subject for purposes which may include prophylaxis, amelioration, prevention or cure of obesity and obesity related disorders or complications. Such treatment need not necessarily completely ameliorate the disorder or other complications related to the specific disorder. Further, such treatment may be used in conjunction with other traditional treatments for treating obesity or a condition related to obesity, known to those of skill in the art.

DETD The methods of the invention may be provided as a "preventive"

treatment before a subject reaches the stages of sever obesity , so as to prevent the related disorder from developing.

DETD The obesity related disorder is selected from the group consisting of, but not limited to insulin resistance, hyperglycaemia (type 2 diabetes), hypertension, dyslipidemia, hyperlipidemia, cardiovascular disease, stroke, gastrointestinal disease, gastrointestinal conditions, osteoarthritis, sleep apnea and respiratory problems, and eating disorders.

DETD As described herein above, obesity is commonly defined by BMI of about 27 and over. However, it is to be understood that employing the compounds of the present invention for the treatment of over weight that does not fall under the definition of obesity is also encompassed within the scope of the present invention. The compounds of the present invention may be used for medical weight loss as well as for non-medical weight loss.

DETD . . . amount" of the compound which is necessary to achieve the desired biological effect, depends on a number of factors; for example the specific compound chosen the intended use, the mode of administration and the clinical condition of the patient. It is anticipated, however, that the dosages required to produce an anti-obesity effect are lower than those disclosed to be effective in any prior immunomodulatory uses of the material AS101.

DETD For illustrative purposes, the use of AS101 in the treatment of obese mice is described. Two models of obesity in mice are provided. In the first model AS101 is administered in the drinking water of the genetically obese ob/ob mice. In the second model normal mice were rendered obese by a 3 month high-fat diet. AS101 was then administered by daily injections while the high-fat diet was continued. In both studies the AS101-treated group exhibited a significant loss of body weight and reduction of food intake. In case of the ob/ob mice a significant reduction of blood glucose was seen as well, demonstrating that AS101 reduces both the obesity and one of its major complications. Histological observations of the liver of ob/ob mice have demonstrated that AS101 significantly reduced the number of liver adipocytes as well as their size.

DETD The results obtained according to the invention indicate that tellurium-containing compounds, specifically AS101 have utility in reducing food intake, and can be used as therapeutics to treat conditions that benefit from reduced food intake, such as obesity and its complications, for example insulin resistance and diabetes.

DETD The present invention further relates to tellurate-containing agents, having an essentially homologous structure, which exhibit similar effects as AS101 on food intake and obesity. Example of such tellurate-containing agents include but not limited to agents obtained by substitution of aliphatic hydrogen residues by halogen radicals, by other functional groups, by extending the aliphatic group by additional methylene residues or by using double bonds instead of single bonds between carbon atoms. Such homologues are readily. . .

DETD According to some embodiments, oral administration of the tellurium or selenium compounds according to the present invention may be given once daily, at a dose range of 0.01 mg/kg body weight to 7.5 mg/kg body weight, particularly from 0.01 mg/kg body weight to 0.75 mg/kg body weight. If desired, a dose regime based on alternate day therapy may be used.

DETD According to certain embodiments, parenteral administration may be at a dose range of from about 0.01 mg/kg body weight per day to 1.0 mg/kg body weight per day. Alternatively,

the same dosage may be given every other day.

DETD . . . Remington's Pharmaceutical Sciences 17th Ed. Mack Publishing (1985), pp. 1301-1306 which is incorporated herein by reference. Combinations of two or more of theses vehicle can also be used. According to some embodiment, the compounds of the present invention are administered topically at a dose range of from about 0.01 mg/kg body weight per day to 2.5 mg/kg body weight per day.

DETD . . . comprises administering to an individual in need thereof an effective amount of a compound having any one of formulae (I) to (VI). Any disease or disorder known today or to be discovered in the future that can be alleviated by reduction of food intake such as, but not limited to, obesity, hypertension, dyslipidemia, hyperlipidemia, cardiovascular risk, stroke, gastrointestinal disease, gastrointestinal conditions, eating disorder, insulin-resistance, and diabetes mellitus, is envisaged for treatment with selenium- and tellurium-containing compounds according to the present invention. According to one currently preferred embodiment, the compound used in the reduction of food intake is a tellurium-containing compound. According. . .

DETD AS101 Reduces the Food Intake, Body Weight and Blood Glucose of ob/ob Mice

DETD . . . (7 mg/L) in addition to the standard chow. The experiment was continued for 18 days and body weights were measured daily. On the average the mice consumed about 1.5 ml of water per 24 h, corresponding to 10 microgram AS101 per mouse per day. This value corresponds to 0.25 mg/kg body weight per 24 h. Preliminary toxicity studies in mice have been previously shown (U.S. Pat. No. 4,764,461) an LD.sub.50 of 300 μg/25 g of body weight in 6-week-old mice (12 mg/kg body weight); the concentration shown in the present invention to be effective is significantly lower, thus may be considered as a non-toxic concentration.

DETD Measurement of the body weight revealed that the Control group gained weight continuously, whereas the AS101 group did not gain weight significantly (FIG. 1). Measurement of daily food consumption revealed a statistically significant reduction of food intake in the AS101 group, in line with the reduction in weight gain. On the average, food consumption was reduced by 26±7% ($p<0.02$, n=16, FIG. 2).

DETD AS101 Reduces Cellularity and Adipocyte Size in the Adipose Tissue of ob/ob Mice

DETD . . . and tissue slices were examined microscopically (FIG. 4). An extensive reduction in the number of adipocytes and in their size was obtained in liver tissues of AS101-treated mice (FIG. 4B) as compared with control mice (FIG. 4 A). This result demonstrates the efficacy of AS101 treatment in reduction of the adipose tissue.

DETD AS101 Reduces the Body Weight of Diet-Induced Obese C57BL/6 Mice

DETD Since the obesity of ob/ob mice is of genetic origin, whereas obesity among human populations is largely due to excess eating over energy expenditure, the effect of AS101 on body weight was studied in diet-induced obese mice. Female mice were fed for 10 weeks with a high fat diet, resulting in moderate obesity (average weight 37 g). Mice were placed in metabolic cages and injected daily with either saline (Control group, 3 mice) or AS 101 (0.5 mg/kg body weight in saline, AS101 group, 3 mice). High fat diet was continued and the body weight was determined daily. As can be seen in FIG. 5, after an initial drop in weight due to stress in the metabolic cage the

weight of the control group remained stable, whereas the weight of AS101-treated mice was reduced significantly and continued to drop through the entire study. Therefore, AS101 is an effective medicament for the treatment of diet-induced obesity.

DETD To gain insight on the mechanism by which AS101 affects the adipose tissue, its effect was studied on an in-vitro model of differentiation of pre-adipocytes into mature adipocytes. It should be clarified here that adipocytes are fully differentiated cells. As such, they do not proliferate. Besides increase in cell volume, the only way to gain weight in vivo is by generating new. . .

CLM What is claimed is:

1. A method of treating obesity comprising administering to an individual in need thereof a pharmaceutical composition comprising a therapeutically effective amount of a compound having any one of formulae (I) (VI): ##STR12## TeO.sub.2 (III) PhTeCl.sub.3 (IV) (C.sub.6H.sub.5).sup.+P(TeCl.sub.3(O.sub.2C.sub.2H.sub.4)).sup.- (V) ##STR13## wherein Q is Te or Se; t is 1 or 0; u is 1 or 0;. . .

CLM What is claimed is:

12. A method of treating obesity related disorders comprising administering to an individual in need thereof a pharmaceutical composition comprising a therapeutically effective amount of a compound having any one of formulae (I)-(VI): ##STR15## TeO.sub.2 (III) PhTeCl.sub.3 (IV) (C.sub.6H.sub.5).sup.+P(TeCl.sub.3(O.sub.2C.sub.2H.sub.4)).sup.- (V) ##STR16## wherein Q is Te or Se; t is 1 or 0; u is 1 or. . .

CLM What is claimed is:

17. The method of claim 12 wherein the obesity related disorder is selected from insulin resistance; hypertension; dyslipidemia; hyperlipidemia, cardiovascular disease; stroke; gastrointestinal disease; gastrointestinal conditions; osteoarthritis; sleep apnea and respiratory problems; and eating disorders.

IT 106566-58-9, As101
(tellurium and selenium compds. for treatment of obesity and related disorders)

IT 7446-07-3, Tellurium dioxide 7782-49-2D, Selenium, compds. 13494-80-9D, Tellurium, compds. 29510-67-6 77593-50-1
(tellurium and selenium compds. for treatment of obesity and related disorders)

L80 ANSWER 6 OF 22 USPATFULL on STN

ACCESSION NUMBER: 2006:74701 USPATFULL Full-text

TITLE: Use of tellurium containing compounds as nerve protecting agents

INVENTOR(S): Sredni, Benjamin, Kfar-Saba, ISRAEL
Albeck, Michael, Ramat-Gan, ISRAEL

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20060063750	A1	20060323
APPLICATION INFO.:	US 2005-226374	A1	20050915 (11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2004-IB4163, filed on 15 Dec 2004, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-530490P	20031218 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: PRTSI, Inc., P.O. Box 16446, Arlington, VA, 22215, US

NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 1687
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel neuroprotective agent is disclosed for the treatment and prevention of neurodegenerative disorders which is based on the administration of an effective amount of a tellurium compound which has a specific ability to induce the differentiation and interfere with apoptotic cell death pathways of neuronal PC-12 cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Sredni, Benjamin, Kfar-Saba, ISRAEL
IN Albeck, Michael, Ramat-Gan, ISRAEL
DRWD FIG. 8 is a plot showing changes in body weight following AS101 administration after spinal cord injury; and
DRWD FIG. 9 is a bar graph showing the effect of AS101 on spinal cord injury-induced decrease in body weight.
DETD As a non-specific marker for recovery, in addition to clinical signs, changes in body weight were recorded. As shown in FIGS. 8 and 9, reduction in body weight following injury was attenuated by administration of AS101.
DETD The results show that during the first week of drug administration following spinal cord injury, AS101 seems to provide therapeutic benefits. This is shown by: (a) the BBB test results (b) reduced mortality (c) relative changes in body weight.
IT 106566-58-9, AS 101
(tellurium compds. as neuroprotectants)

L80 ANSWER 7 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2005:4985 USPATFULL Full-text
TITLE: Biologically active complex
INVENTOR(S): Albeck, Michael, Ramat Chen, ISRAEL
Srendni, Benjamin, Kfar Saba, ISRAEL

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20050004091	A1	20050106	
	US 7276628	B2	20071002	
APPLICATION INFO.:	US 2004-496729	A1	20040521	(10)
	WO -IL200936			

	NUMBER	DATE
PRIORITY INFORMATION:	IL 2001-146694	20011122

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Carter Deluca Farrell & Schmidt, 445 Broad Hollow Road, Suite 225, Melville, NY, 11747
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 990
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to an aqueous solution containing at least one species selected from the group consisting of a 1:1 molar complex of TeO2 with a moiety of formula (A) and ammonium salts thereof: HO--X--OH (A) where X is an optionally substituted divalent saturated hydrocarbon group containing 2-8 carbon atoms in the chain connecting the two OH groups, and its use for

stimulating cells to produce cytokines and for treating mammalian diseases and conditions responsive to increased production of cytokines. The complex may be used also for treating mammalian cancer which is not responsive to increased production of cytokines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Albeck, Michael, Ramat Chen, ISRAEL
DETD . . . the form of aqueous solutions, used to stimulate lymphokine production or treat the specific disease condition described herein may be varied depending on the particular disease and the stage of the disease. Generally an amount of the complex may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokines production but the dosage may be adjusted according to the individual response and the particular condition that is being treated.
DETD . . . be used in treating the mammalian disorders described hereinabove. For in vitro use, cells may be stimulated to produce lymphokines by use of 1+10.sup.-8 to 1+10.sup.-4, preferably 1+10.sup.-7 to 1+10.sup.-5 g of complex per 10.sup.6 cells/ml. Preliminary toxicity studies in mice have established an LD.sub.50 of 300 μg/25 g of body weight in 6 week old mice for the complex of Example 1. The complexes may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the complex of the Example 1 at a dose of 10. . .
IT 106444-33-1P 106566-58-9P
(cytokine-inducing tellurium complex Biol. active complex)

L80 ANSWER 8 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2003:165555 USPATFULL Full-text
TITLE: Tellurium containing nutrient formulation and process for enhancing the cumulative weight gain or feed efficacy in poultry
INVENTOR(S): Strassmann, Gideon, Washington, DC, UNITED STATES
Sredni, Benjamin, Kfar Saba, ISRAEL
Albeck, Michael, Ramat Gan, ISRAEL
Shmulewitz, Ascher, Tel Aviv, ISRAEL

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20030113409	A1	20030619	
	US 7045150	B2	20060516	
APPLICATION INFO.:	US 2001-918865	A1	20010731	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: James V. Costigan, Esq., HEDMAN & COSTIGAN, P.C., Suite 2003, 1185 Avenue of the Americas, New York, NY, 10036-2646
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 597
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel nutrient formulation containing tellurium for use in poultry, and a method of feeding it which improves subsequent livability, cumulative feed efficacy or weight gain is disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Sredni, Benjamin, Kfar Saba, ISRAEL
IN Albeck, Michael, Ramat Gan, ISRAEL
SUMM [0002] This invention relates to a tellurium containing nutritional formulation that enhances the cumulative weight gain and feed efficacy in poultry. There is compelling evidence from the investigation of chick models that tellurium compounds act to influence the growth performance of chicks. The additive effects in increasing body weight are dose related and most significant at tellurium compound feed concentrations of 12.5 g/metric ton.
SUMM [0006] According to the state of the art, at 14 days, approximately 50% of the broilers have a body weight of between 365 and 390 grams, and at 42 days, approximately 60% of the broilers have a body weight between 2100 and 2300 grams.
DETD . . . performance of groups of three day old birds, fed AS101 concentrations of 500 mg/metric ton, 2,500 mg/metric ton or 12,500 mg/metric ton were compared to groups of control birds fed either a standard feeding diet without selenium or a standard feeding diet with an addition of 300 mg/metric ton selenium. Body weight (BW) was measured after 24 days. At the end of 24 days, the animals were examined for gross signs of toxicity. A gross visual examination was carried out. The liver of each chick was extracted and weighed. No pathological changes were observed in histological studies.
DETD [0055] Results are presented in Table 1. The group with the lowest mean body weight was 130 Group 1, where the diet was the standard feeding diet without selenium. Group 2, which was fed the diet of Group 1, with an addition of 300 mg/ton of selenium showed a 0.4% increase in BW over Group 1. The increase in BW is caused by the addition. . .
IT 50-81-7, Ascorbic acid, biological studies 58-85-5, Biotin 59-30-3, Folic acid, biological studies 59-67-6, Niacin, biological studies 65-23-6, Pyridoxine 67-03-8, Thiamin hydrochloride 67-48-1, Choline chloride 68-19-9, Vitamin B12 68-26-8, Vitamin A 83-88-5, Riboflavin, biological studies 87-89-8, Inositol 137-08-6, Calcium pantothenate 150-13-0, p-Aminobenzoic acid 1406-16-2, Vitamin D 1406-18-4, Vitamin E 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7439-98-7, Molybdenum, biological studies 7440-02-0, Nickel, biological studies 7440-09-7, Potassium, biological studies 7440-21-3, Silicon, biological studies 7440-23-5, Sodium, biological studies 7440-31-5, Tin, biological studies 7440-47-3, Chromium, biological studies 7440-48-4, Cobalt, biological studies 7440-50-8, Copper, biological studies 7440-62-2, Vanadium, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies 7446-07-3, Tellurium oxide (TeO2) 7553-56-2, Iodine, biological studies 7782-49-2, Selenium, biological studies 7782-50-5, Chlorine, biological studies 10102-18-8, Sodium selenite 12001-79-5, Vitamin K 13494-80-9, Tellurium, biological studies 29510-67-6 77593-50-1 106566-58-9
(tellurium-containing nutrient product for use in meat producing poultry)

L80 ANSWER 9 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2003:109129 USPATFULL Full-text
TITLE: Method of treating or preventing alopecia
INVENTOR(S): Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, ISRAEL
Albeck, Michael, 8 Harel Street, Ramat-Gan, ISRAEL

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6552089	B1	20030422
APPLICATION INFO.:	US 1996-758106		19961129 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-391723, filed on 17 Feb 1995, now abandoned Continuation of Ser. No. US 1993-109654, filed on 20 Aug 1993, now abandoned Continuation of Ser. No. US 1992-929681, filed on 13 Aug 1992, now patented, Pat. No. US 5262149
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Padmanabhan, Sreeni
ASSISTANT EXAMINER: Wang, Shengjun
LEGAL REPRESENTATIVE: Hedman & Costigan, P.C.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 366
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present application discloses a method of treating alopecia which is based on the use of a tellurium compound such as ammonium trichloro(dioxoethylene-O,O-tellurate).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, ISRAEL
IN Albeck, Michael, 8 Harel Street, Ramat-Gan, ISRAEL
SUMM The tellurium compound may be administered by systemic administration by the intramuscular, intravenous or intraperitoneal route to mammals including humans, at doses of 0.025 to 0.5 mg/Kg of body weight every second day.
SUMM Examples of suitable vehicles include petrolatum, Aquaphor, Neobase, propylene glycol, glycerin and the like. These base materials are described in Remington's Pharmaceutical Sciences 17th Ed. Mack Publishing (1985), pp. 1301-1306 which is incorporated herein by reference. Generally, from 1 mg to 2.5 mg/Kg of body weight is applied once daily to the area to be treated. A preferred method of application is based on the use of a vehicle which is a thick liquid having a concentration of 200 μg of tellurium compound/0.2 ml of solution.
SUMM When the method of the invention is practiced by parental administration, it may be preferred to administer the tellurium compound by subcutaneous injection at multiple sites (e.g. one injection per sq cm) within the affected area. The doses will be 0.25 mg/Kg to 2.5 mg/Kg of body weight given once daily, or in divided doses in an appropriate vehicle such as PBS. If desired, a dose regimen based on alternate day therapy may be used.
SUMM The tellurium compound may be administered orally at 2.5 mg/Kg to 7.5 mg/Kg of body weight given once daily. If desired, a dose regimen based on alternate day therapy may be used.
IT 7446-07-3, Tellurium dioxide 7446-07-3D, Tellurium dioxide, complexes 7782-49-2D, Selenium, compds. 29510-67-6, Phenyltellurium trichloride 106566-58-9
(alopecia from chemotherapy prevention by)

L80 ANSWER 10 OF 22 USPATFULL on STN
ACCESSION NUMBER: 97:68495 USPATFULL Full-text
TITLE: Method and composition for reducing tumor development with a combination of platinum and tellurium or selenium compounds

INVENTOR(S): Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, Israel
Albeck, Michael, 8 Harel Street-52444, Ramat-Gan, Israel

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5654328		19970805
APPLICATION INFO.:	US 1994-357127		19941215 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rollins, John W.
LEGAL REPRESENTATIVE: Hedman, Gibson & Costigan, P.C.
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 391
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There are provided compositions for, and a method of, treating malignancies which comprise effective amounts of a novel combined therapy comprising a platinum compound and a tellurium or selenium compound, e.g., ammonium trichloro (dioxoethylene-O,O-tellurate), and administering the respective compounds simultaneously or separately.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, Israel
IN Albeck, Michael, 8 Harel Street-52444, Ramat-Gan, Israel
DETD For the treatment of malignancies which are susceptible to treatment, the tellurium compound may be administered by the oral, intramuscular, intravenous, transdermal or intraperitoneal route to mammals including humans. The oral dose will be 0.15 to 0.5 mg/kg of body weight daily and preferably from 0.03 to 0.1 mg/kg of body weight daily in one dose or in divided doses. The parenteral dose will be 0.03 to 0.2 mg/kg of body weight daily and preferably from 0.006 to 0.02 mg/kg daily given as a bolus injection or as a continuous parenteral infusion. The dose of the platinum compound to be used is an effective amount to exert an anti-tumor effect on the particular tumor which is being treated. The dose will depend. . .
IT 15663-27-1, Cisplatin 106566-58-9
(platinum compd.combination with tellurium compound or selenium compound for tumor treatment)
IT 7440-06-4D, Platinum, compds. 7446-07-3, Tellurium oxide 7782-49-2D, Selenium, compds. 13494-80-9D, Tellurium, compds. 29510-67-6 41575-94-4, Carboplatin 77593-50-1
(platinum compd.combination with tellurium compound or selenium compound for tumor treatment)

L80 ANSWER 11 OF 22 USPATFULL on STN
ACCESSION NUMBER: 97:20548 USPATFULL Full-text
TITLE: Method of treating babesiosis
INVENTOR(S): Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, Israel
Albeck, Michael, 8 Harel Street, 52444 Ramat-Gan, Israel

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5610179		19970311

APPLICATION INFO.: US 1994-357129 19941215 (8)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rollins, John W.
LEGAL REPRESENTATIVE: Hedman, Gibson & Costigan, P.C.
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 438
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of treating or preventing babesiosis is described which is based on the administration of a tellurium compound. The preferred tellurium compound is ammonium trichloro (O,O'-dioxoethylene tellurate).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, Israel
IN Albeck, Michael, 8 Harel Street, 52444 Ramat-Gan, Israel
DETD For the prevention and treatment of babesiosis, the tellurium compound may be administered by the oral, intramuscular, intravenous, transdermal or intraperitoneal route to mammals including humans. The oral dose will be 0.15 to 0.5 mg/kg of body weight daily and preferably from 0.03 to 0.1 mg/kg of body weight daily in one dose or in divided doses. The parenteral dose will be 0.03 to 0.2 mg/kg of body weight daily and preferably from 0.006 to 0.02 mg/kg daily given as a bolus injection or as a continuous parenteral infusion.
IT 7446-07-3, Tellurium dioxide 7446-07-3D, Tellurium dioxide, complexes 13494-80-9D, Tellurium, compds., biological studies 29510-67-6 106566-58-9
(tellurium compds. for treatment of babesiosis)

L80 ANSWER 12 OF 22 USPATFULL on STN
ACCESSION NUMBER: 96:106519 USPATFULL Full-text
TITLE: Method of treating gastric ulcers
INVENTOR(S): Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, Israel
Albeck, Michael, 8 Harel Street, Ramat-Gan, Israel

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5576347		19961119
APPLICATION INFO.:	US 1994-339334		19941114 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Jordan, Kimberly
LEGAL REPRESENTATIVE: Hedman, Gibson & Costigan, P.C.
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 397
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention is based on the use of a tellurium compound to treat or prevent gastritis or peptic ulcer. The tellurium compounds may be administered orally or parenterally to a host who is afflicted with or is susceptible to these conditions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, Israel
IN Albeck, Michael, 8 Harel Street, Ramat-Gan, Israel
DETD For the prevention and treatment of gastritis and peptic ulcer, the tellurium compound may be administered by the oral, intramuscular, intravenous, transdermal or intraperitoneal route to mammals including humans. The oral dose will be 0.15 to 0.5 mg/kg of body weight daily and preferably from 0.03 to 0.1 mg/kg of body weight daily in one dose or in divided doses. The parenteral dose will be 0.03 to 0.2 mg/kg of body weight daily and preferably from 0.006 to 0.02 mg/kg daily given as a bolus injection or as a continuous parenteral infusion.
IT 7446-07-3, Tellurium dioxide 29510-67-6, Phenyltellurium trichloride 106566-58-9, AS 101
(tellurium compds. for treating gastric ulcers)

L80 ANSWER 13 OF 22 USPATFULL on STN
ACCESSION NUMBER: 95:110478 USPATFULL Full-text
TITLE: Complexes of tellurium and selenium derivatives
INVENTOR(S): Sredni, Benjamin, Yona Hanavi Street 22, Beni Brak, Israel
Pavliv, Leo, 8 Harel Street, Somerville, NJ, United States
Albeck, Michael, 8 Harel Street, Ramat-Gan, Israel 52223
PATENT ASSIGNEE(S): Albeck, Michael, both of, Israel (non-U.S. individual)
Sredni, Benjamin, both of, Israel (non-U.S. individual)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5475030		19951212
APPLICATION INFO.:	US 1993-123422		19930917 (8)

DISCLAIMER DATE: 20070529
RELATED APPLN. INFO.: Continuation of Ser. No. US 1990-500296, filed on 27 Mar 1990, now abandoned which is a division of Ser. No. US 1988-172643, filed on 24 Mar 1988, now patented, Pat. No. US 4929739
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ivy, C. Warren
ASSISTANT EXAMINER: Owens, Amelia
LEGAL REPRESENTATIVE: Hedman, Gibson & Costigan
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
LINE COUNT: 455
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel complex of a class of tellurium and selenium compounds is disclosed, which is based on a complexing agent and the particular compound to be complexed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Sredni, Benjamin, Yona Hanavi Street 22, Beni Brak, Israel
IN Albeck, Michael, 8 Harel Street, Ramat-Gan, Israel 52223
SUMM . . . the compounds of the invention used to stimulate lymphokine production or treat the specific disease condition described wherein may be varied depending on the particular disease and the stage of the disease. Generally an amount of the compound may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example

a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokine production but the dosage may be adjusted according to the individual response and the particular condition that is being treated. For the treatment of AIDS 1.0-9.0 mg/m.sup.2. . .

SUMM Preliminary toxicity studies in mice have established an LD.sub.50 of 300 μg./25 g of body weight in 6 week old mice for the compound of Example 1. The compounds may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the compound of the Example 1 at a dose of 10. . .

IT 77-92-9D, Citric acid, complexes with organotellurium or organoselenium compds. 87-69-4D, Tartaric acid, complexes with organotellurium or organoselenium compds. 994-36-5D, Sodium citrate, complexes with organotellurium or organoselenium compds. 7446-07-3D, Tellurium dioxide, complexes with complexing agents 7782-49-2D, Selenium, organo-, complexes with complexing agents 13494-80-9D, Tellurium, organo-, complexes with complexing agents 29510-67-6D, complexes with complexing agents 40968-90-9D, Potassium tartrate, complexes with organotellurium or organoselenium compds. 77593-50-1D, complexes with complexing agents 106566-58-9D, complexes with citrate and tartrate
(cytokine-inducing activity of)

L80 ANSWER 14 OF 22 USPATFULL on STN

ACCESSION NUMBER:	93:106800 USPATFULL Full-text
TITLE:	Method for protecting against the effects of radiation which is based on the administration of a selenium or tellurium based compound
INVENTOR(S):	Sredni, Benjamin, Yona Hanavi Street 22, Beni Brak, Israel Albeck, Michael, 8 Harel Street, Ramat-Gan, Israel

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5271925		19931221
APPLICATION INFO.:	US 1992-846562		19920305 (7)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1990-491681, filed on 9 Mar 1990, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Raymond, Richard L.
ASSISTANT EXAMINER:	Hollinden, Gary E.
LEGAL REPRESENTATIVE:	Hedman, Gibson & Costigan
NUMBER OF CLAIMS:	8
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT:	664

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for providing radioprotection to humans and other animals employing certain organic derivatives of tellurium and selenium are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Sredni, Benjamin, Yona Hanavi Street 22, Beni Brak, Israel

IN Albeck, Michael, 8 Harel Street, Ramat-Gan, Israel

DETD The dosage of the compounds of the invention used to effect radioprotection may be varied depending on the particular dose of irradiation. Generally an amount of the compound may be administered

which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 kg mammal is contemplated as a sufficient amount to induce radioprotection but the dosage may be adjusted according to the individual response and the particular condition that is being treated.

IT 7446-07-3, Tellurium dioxide 29510-67-6, Phenyltellurium trichloride 77593-49-8 77593-50-1 106566-58-9
(as radioprotectant, for bone marrow)

L80 ANSWER 15 OF 22 USPATFULL on STN

ACCESSION NUMBER:	93:95870 USPATFULL Full-text
TITLE:	Method of treating or preventing alopecia
INVENTOR(S):	Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, Israel Albeck, Michael, 8 Harel Street, Ramat-Gan, Israel

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5262149		19931116	
APPLICATION INFO.:	US 1992-929681		19920813	(7)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Schenkman, Leonard
LEGAL REPRESENTATIVE:	Hedman, Gibson & Costigan
NUMBER OF CLAIMS:	7
EXEMPLARY CLAIM:	1
LINE COUNT:	433

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for treating or preventing alopecia which is induced by an antineoplastic compound is disclosed which is based on the administration of a particular tellurium or selenium derivative to a patient prior to the administration of a antineoplastic agent to said patent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Sredni, Benjamin, Shachal 3 Street, Kfar-Saba, Israel

IN Albeck, Michael, 8 Harel Street, Ramat-Gan, Israel

DETD The tellurium compound may be administered by systemic administration by the intramuscular, intravenous or intraperitoneal route to mammals including humans, at doses of 0.025 to 0.5 mg/Kg of body weight every second day.

DETD Examples of suitable vehicles include petrolatum, Aquaphor, Neobase, propylene glycol, glycerin and the like. These base materials are described in Remington's Pharmaceutical Sciences 17th Ed. Mack Publishing (1985), pp. 1301-1306 which is incorporated herein by reference. Generally, from 1 mg to 2.5 mg/Kg of body weight is applied once daily to the area to be treated. A preferred method of application is based on the use of a vehicle which is a thick liquid having a concentration of 200 μg of tellurium compound/0.2 ml of solution.

DETD When the method of the invention is practiced by parental administration, it may be preferred to administer the tellurium compound by subcutaneous injection at multiple sites (e.g. one injection per sq cm) within the affected area. The doses will be 0.25 mg/Kg to 2.5 mg/Kg of body weight given once daily, or in divided doses in an appropriate vehicle such as PBS. If desired, a dose regimen based on alternate day therapy may be used.

DETD The tellurium compound may be administered rally at 2.5 mg/Kg to 7.5 mg/Kg of body weight given once daily. If desired, a dose regimen based on alternate day therapy may be used.

IT 7446-07-3, Tellurium dioxide 7446-07-3D, Tellurium dioxide, complexes 7782-49-2D, Selenium, compds. 29510-67-6, Phenyltellurium trichloride 106566-58-9
(alopecia from chemotherapy prevention by)

L80 ANSWER 16 OF 22 USPATFULL on STN

ACCESSION NUMBER: 92:27553 USPATFULL Full-text

TITLE: Method of treating Acquired Immunedeficiency Syndrome (AIDS) using organic tellurium and selenium derivatives

INVENTOR(S): Albeck, Michael, 8 Harel Street, Ramat Gun, Israel
Sredni, Benjamin, Yona Hanavi St 22, Bnei Brak, Israel

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5102908		19920407
APPLICATION INFO.:	US 1990-531887		19900601 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 1987-107131, filed on 9 Oct 1987, now patented, Pat. No. US 4962207 which is a continuation-in-part of Ser. No. US 1985-782129, filed on 30 Sep 1985, now patented, Pat. No. US 4761480 which is a continuation-in-part of Ser. No. US 1985-712549, filed on 15 Mar 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-599511, filed on 12 Apr 1984, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Waddell, Frederick E.
ASSISTANT EXAMINER: Hook, Gregory
LEGAL REPRESENTATIVE: Hedman, Gibson & Costigan
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
LINE COUNT: 453

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for the treatment of Acquired Immune Deficiency Syndrome is disclosed, which is based on the administration of a tellurium derivative of the formula: ##STR1## wherein Q is Te or Se; t is 1 or 0; u is 1 or 0; v is 1 or 0; R, R.sub.1, R.sub.2, R.sub.3, R.sub.4, R.sub.5, R.sub.6, R.sub.7, R.sub.8, and R.sub.9 are the same or different and are independently selected from the group consisting of hydrogen, hydroxyalkyl of 1 to 5 carbons, hydroxy, alkyl of from 1 to 5 carbon atoms, halogen, haloalkyl of 1 to 5 carbon atoms, carboxy, alkylcarbonylalkyl of 2 to 10 carbons, alkanoyloxy of 1 to 5 carbon atoms, carboxyalkyl of 1 to 5 carbon atoms, acyl, amido, cyano, amidoalkyl of 1 to 5 carbons, N-monoalkylamidoalkyl of 2 to 10 carbons, N,N-dialkylamidoalkyl of 4 to 10 carbon, cyanoalkyl of 1 to 5 carbons, alkoxy of 1 to 5 carbon atoms, alkoxyalkyl of 2 to 10 carbons atoms and --COR.sub.10 wherein R.sub.10 is alkyl of from 1 to 5 carbons; and X is halogen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Albeck, Michael, 8 Harel Street, Ramat Gun, Israel

IN Sredni, Benjamin, Yona Hanavi St 22, Bnei Brak, Israel

DETD . . . the compounds of the invention used to stimulate lymphokine production or treat the specific disease condition described herein may be varied depending on the particular disease and the stage of the

disease. Generally an amount of the compound may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokine production but the dosage may be adjusted according to the individual response and the particular condition that is being treated. For the treatment of AIDS 1.0-9.0 mg/m.sup.2. . .

DETD Preliminary toxicity studies in mice have established an LD.sub.50 of 300 ug./25 g of body weight in 6 week old mice for the compound of Example 1. The compounds may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the compound of the Example 1 at a dose of 10. . .

IT 176-57-8P 6069-50-7P 106444-33-1P 106512-57-6P 106512-58-7P 106512-59-8P 106512-60-1P 106566-58-9P
(preparation of, as lymphokine inducer)

L80 ANSWER 17 OF 22 USPATFULL on STN

ACCESSION NUMBER: 92:16929 USPATFULL Full-text

TITLE: Compounds for the induction of in vivo and in vitro production of cytokines

INVENTOR(S): Albeck, Michael, 9 Harel Street, Ramat Gan, Israel 52223
Srednl, Benjamin, Yona Hanvi St. 22, Bnei Brak, Israel 52223

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5093135		19920303
APPLICATION INFO.:	US 1987-136396		19871222 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 1987-57799, filed on 3 Jun 1987, now patented, Pat. No. US 4752614

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Goldberg, Jerome D.

LEGAL REPRESENTATIVE: Hedman, Gibson & Costigan

NUMBER OF CLAIMS: 3

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)

LINE COUNT: 986

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Certain tellurium compounds have been found to have the ability to stimulate the in vivo and in vitro production of cytokines and thier receptors. These compounds may be utilized in the treatment of autoimmune diseases, immune diseases and infectious diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Albeck, Michael, 9 Harel Street, Ramat Gan, Israel 52223

IN Srednl, Benjamin, Yona Hanvi St. 22, Bnei Brak, Israel 52223

DETD . . . the compounds of the invention used to stimulate lymphokine production or treat the specific disease condition described herein may be varied depending on the particular disease and the stage of the disease. Generally an amount of the compound may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a

sufficient amount to induce lymphokines production but the dosage may be adjusted according to the individual response and the particular condition that is being treated.

DETD Preliminary toxicity studies in mice have established an LD.sub.50 of 300 ug./25 g of body weight in 6 week old mice for the compound of Example 1. The compounds may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the compound of the Example 1 at a dose of 10. . .

CLM What is claimed is:

2. A pharmaceutical composition as defined in claim 1, wherein the tellurium dioxide comprises an amount to provide a dose of from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight of a mammal.

IT 176-57-8P 6069-50-7P 106444-33-1P 106512-57-6P 106512-58-7P 106512-59-8P 106512-60-1P 106566-58-9P
(preparation of, as lymphokine inducer)

L80 ANSWER 18 OF 22 USPATFULL on STN

ACCESSION NUMBER:	90:78340 USPATFULL Full-text
TITLE:	Organic derivatives of tellurium and selenium
INVENTOR(S):	Albeck, Michael, Ramat Gan, Israel Sredni, Benjamin, Bnei Brak, Israel
PATENT ASSIGNEE(S):	Bar-Ilan University, Ramat-Gan, Israel (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4962207		19901009
APPLICATION INFO.:	US 1987-107131		19871009 (7)
DISCLAIMER DATE:	20050621		
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1985-782129, filed on 30 Sep 1985, now patented, Pat. No. US 4761490 which is a continuation-in-part of Ser. No. US 1985-712549, filed on 15 Mar 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-599511, filed on 12 Apr 1984, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Draper, Garnette		
LEGAL REPRESENTATIVE:	Hedman, Gibson, Costigan & Hoare		
NUMBER OF CLAIMS:	4		
EXEMPLARY CLAIM:	1		
LINE COUNT:	439		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present application discloses novel potassium salts of particular tellurium and selenium compounds which are useful for the stimulation of the production of cytokines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Albeck, Michael, Ramat Gan, Israel

IN Sredni, Benjamin, Bnei Brak, Israel

SUMM . . . the compounds of the invention used to stimulate lymphokine production or treat the specific disease condition described herein may be varied depending on the particular disease and the stage of the disease. Generally an amount of the compound may be administered which will range from 0.05+10 to 1+10 g/Kg of body weight and preferably from 0.1+10 to 0.5+10 g/Kg of

body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokine production but the dosage may be adjusted according to the individual response and the particular condition that is being treated. For the treatment of AIDS 1.0-9.0 mg/m. . .

SUMM Preliminary toxicity studies in mice have established an LD.sub.50 of 300 ug./25g of body weight in 6 week old mice for the compound of Example 1. The compounds may be used as anti-bacterial and anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the compound of the Example 1 at a dose of 10. . .

IT 176-57-8P 6069-50-7P 106444-33-1P 106512-57-6P 106512-58-7P 106512-59-8P 106512-60-1P 106566-58-9P
(preparation of, as lymphokine inducer)

L80 ANSWER 19 OF 22 USPATFULL on STN

ACCESSION NUMBER:	90:42635 USPATFULL	Full-text
TITLE:	Complexes of tellurium and selenium derivatives	
INVENTOR(S):	Sredni, Benjamin, Beni Brak, Israel Pavliv, Leo, Somerville, NJ, United States Albeck, Michael, Ramat-Gan, Israel	
PATENT ASSIGNEE(S):	Bar-Ilan University, Ramat-Gan, Israel (non-U.S. corporation)	

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4929739		19900529	
APPLICATION INFO.:	US 1988-172643		19880324	(7)
DISCLAIMER DATE:	20050621			
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Dixon, Jr., William R.			
ASSISTANT EXAMINER:	Sohn, Miriam			
LEGAL REPRESENTATIVE:	Hedman, Gibson, Costigan & Hoare			
NUMBER OF CLAIMS:	17			
EXEMPLARY CLAIM:	1			
LINE COUNT:	451			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel complex of a class of tellurium and selenium compounds is disclosed, which is based on a complexing agent and the particular compound to be complexed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Sredni, Benjamin, Beni Brak, Israel

IN Albeck, Michael, Ramat-Gan, Israel

SUMM . . . the compounds of the invention used to stimulate lymphokine production or treat the specific disease condition described herein may be varied depending on the particular disease and the stage of the disease. Generally an amount of the compound may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokine production but the dosage may be adjusted according to the individual response and the particular condition that is being treated. For the treatment of AIDS 1.0-9.0 mg/m.sup.2. . .

SUMM Preliminary toxicity studies in mice have established an LD.sub.50 of 300 μg./25 g of body weight in 6 week old mice

for the compound of Example 1. The compounds may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the compound of the Example 1 at a dose of 10. . .

IT 77-92-9D, Citric acid, complexes with organotellurium or organoselenium compds. 87-69-4D, Tartaric acid, complexes with organotellurium or organoselenium compds. 994-36-5D, Sodium citrate, complexes with organotellurium or organoselenium compds. 7446-07-3D, Tellurium dioxide, complexes with complexing agents 7782-49-2D, Selenium, organo-, complexes with complexing agents 13494-80-9D, Tellurium, organo-, complexes with complexing agents 29510-67-6D, complexes with complexing agents 40968-90-9D, Potassium tartrate, complexes with organotellurium or organoselenium compds. 77593-50-1D, complexes with complexing agents 106566-58-9D, complexes with citrate and tartrate
(cytokine-inducing activity of)

L80 ANSWER 20 OF 22 USPATFULL on STN
ACCESSION NUMBER: 88:52037 USPATFULL Full-text
TITLE: Tellurium and selenium compounds for the induction of in vivo and in vitro production of cytokines
INVENTOR(S): Albeck, Michael, Ramat Gan, Israel
Sredni, Benjamin, Bnei Brak, Israel
PATENT ASSIGNEE(S): Bar-Ilan University, Ramat-Gan, Israel (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4764461		19880816
APPLICATION INFO.:	US 1987-57800		19870603 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 1985-782129, filed on 30 Sep 1985 which is a continuation-in-part of Ser. No. US 1985-712549, filed on 15 Mar 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-599511, filed on 12 Apr 1984, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Draper, Garnette D.
LEGAL REPRESENTATIVE: Hedman, Gibson, Costigan & Hoare
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1021
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Certain tellurium compounds have been found to have the ability to stimulate the in vivo and in vitro production of cytokines and their receptors. These compounds may be utilized in the treatment of certain tumors, autoimmune diseases, immune diseases and infectious diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IN Albeck, Michael, Ramat Gan, Israel
IN Sredni, Benjamin, Bnei Brak, Israel
DETD . . . the compounds of the invention used to stimulate lymphokine production or treat the specific disease condition described herein may be varied depending on the particular disease and the stage of the disease. Generally an amount of the compound may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to

0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokines production but the dosage may be adjusted according to the individual response and the particular condition that is being treated.

DETD Preliminary toxicity studies in mice have established an LD.sub.50 of 300 ug./25 g of body weight in 6 week old mice for the compound of Example 1. The compounds may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the compound of the Example 1 at a dose of 10. . .

IT 176-57-8P 6069-50-7P 106444-33-1P 106512-57-6P 106512-58-7P 106512-59-8P 106512-60-1P 106566-58-9P
(preparation of, as lymphokine inducer)

L80 ANSWER 21 OF 22 USPATFULL on STN

ACCESSION NUMBER: 88:48837 USPATFULL Full-text

TITLE: Organic derivatives of tellurium and selenium and their use to stimulate cytokine production

INVENTOR(S): Albeck, Michael, Ramat Gan, Israel
Sredni, Benjamin, Bnei Brak, Israel

PATENT ASSIGNEE(S): Bar-Ilan University, Ramat Gan, Israel (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4761490		19880802
APPLICATION INFO.:	US 1985-782129		19850930 (6)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1985-712549, filed on 15 Mar 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-599511, filed on 12 Apr 1984, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Draper, Garnette D.
LEGAL REPRESENTATIVE: Hedman, Gibson, Costigan, & Hoare
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1040

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Certain tellurium compounds have been found to have the ability to stimulate the in vivo and in vitro production of cytokines and their receptors. These compounds may be utilized in the treatment of certain tumors, autoimmune diseases, immune diseases and infectious diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Albeck, Michael, Ramat Gan, Israel

IN Sredni, Benjamin, Bnei Brak, Israel

DETD . . . the compounds of the invention used to stimulate lymphokine production or treat the specific disease condition described herein may be varied depending on the particular disease and the stage of the disease. Generally an amount of the compound may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokines production but the dosage may be

adjusted according to the individual response and the particular condition that is being treated.

DETD Preliminary toxicity studies in mice have established an LD.sub.50 of 300 ug./25 g of body weight in 6 week old mice for the compound of Example 1. The compounds may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the compound of the Example 1 at a dose of 10. . .

IT 176-57-8P 6069-50-7P 106444-33-1P 106512-57-6P 106512-58-7P 106512-59-8P 106512-60-1P 106566-58-9P
(preparation of, as lymphokine inducer)

L80 ANSWER 22 OF 22 USPATFULL on STN

ACCESSION NUMBER: 88:39201 USPATFULL Full-text

TITLE: Pharmaceutical compositions of tellerium and selenium compounds for the induction of in vivo and in vitro production of cytokines

INVENTOR(S): Albeck, Michael, Ramat Gan, Israel
Sredni, Benjamin, Bnei Brak, Israel

PATENT ASSIGNEE(S): Bar-Ilan University, Ramat Gan, Israel (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4752614		19880621
APPLICATION INFO.:	US 1987-57799		19870603 (7)

RELATED APPLN. INFO.: Division of Ser. No. US 1985-782129, filed on Mar 1985 which is a continuation-in-part of Ser. No. US 1985-712549, filed on 15 Mar 1985, now abandoned which is a continuation-in-part of Ser. No. US 1984-599511, filed on 12 Apr 1984, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, John
ASSISTANT EXAMINER: Draper, Garnette D.
LEGAL REPRESENTATIVE: Hedman, Gibson, Costigan & Hoare
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1030
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Certain tellurium compounds have been found to have the ability to stimulate the in vivo and in vitro production of cytokines and their receptors. These compounds may be utilized in the treatment of certain tumors, autoimmune diseases, immune diseases and infectious diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IN Albeck, Michael, Ramat Gan, Israel

IN Sredni, Benjamin, Bnei Brak, Israel

DETD . . . the compounds of the invention used to stimulate lymphokine production or treat the specific disease condition described herein may be varied depending on the particular disease and the stage of the disease. Generally an amount of the compound may be administered which will range from 0.05+10.sup.-3 to 1+10.sup.-3 g/Kg of body weight and preferably from 0.1+10.sup.-3 to 0.5+10.sup.-3 g/Kg of body weight. For example a dosage of 1-3 mg per day for a 75 Kg mammal is contemplated as a sufficient amount to induce lymphokines production but the dosage may be adjusted according to the individual response and the particular

condition that is being treated.

DETD Preliminary toxicity studies in mice have established an LD.sub.50 of 300 μg./25 g of body weight in 6 week old mice for the compound of Example 1. The compounds may be used as anti-bacterial or anti-viral agents in plants or in animals. Virus infections such as West Nile virus infections in mice are susceptible to the compound of the Example 1 at a dose of 10. . .

IT 176-57-8P 6069-50-7P 106444-33-1P 106512-57-6P 106512-58-7P 106512-59-8P 106512-60-1P 106566-58-9P
(preparation of, as lymphokine inducer)

TEXT SEARCH PART 1

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=> fil hcapl; d que l34
FILE 'HCAPLUS' ENTERED AT 14:48:07 ON 12 JUN 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 12 Jun 2009  VOL 150 ISS 25
FILE LAST UPDATED: 11 Jun 2009  (20090611/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Feb 2009

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE


L3            4 SEA FILE=REGISTRY SPE=ON  ABB=ON  77593-49-8/CRN
L5           97 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L3
L8        41895 SEA FILE=HCAPLUS SPE=ON  ABB=ON  OBESITY/CT
L9        48960 SEA FILE=HCAPLUS SPE=ON  ABB=ON  ADIPOSE TISSUE/CT
L10       12208 SEA FILE=HCAPLUS SPE=ON  ABB=ON  ANTIOBESITY AGENTS/CT
L11       21483 SEA FILE=HCAPLUS SPE=ON  ABB=ON  APPETITE/CW
L12       35305 SEA FILE=HCAPLUS SPE=ON  ABB=ON  BODY WEIGHT/CT
L13        1627 SEA FILE=HCAPLUS SPE=ON  ABB=ON  ADIPOSITY/OBI OR CORPULEN?/OBI

L34           1 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L5 AND (L8 OR L9 OR L10 OR
                 L11 OR L12 OR L13)


=> d scan ti l34

L34   1 ANSWERS   HCAPLUS  COPYRIGHT 2009 ACS on STN
TI   Methods of treating obesity and related disorders using tellurium and
     selenium compounds
                                    THIS REFERENCE WAS PRINTED IN FULL WITH THE
                                          INVENTOR SEARCH
ALL ANSWERS HAVE BEEN SCANNED
```

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=> fil uspatf; d que l47
FILE 'USPATFULL' ENTERED AT 14:48:20 ON 12 JUN 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 11 Jun 2009 (20090611/PD)
FILE LAST UPDATED: 11 Jun 2009 (20090611/ED)
HIGHEST GRANTED PATENT NUMBER: US7546642
HIGHEST APPLICATION PUBLICATION NUMBER: US20090151035
CA INDEXING IS CURRENT THROUGH 11 Jun 2009 (20090611/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 11 Jun 2009 (20090611/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

USPATFULL now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.


L3             4 SEA FILE=REGISTRY SPE=ON  ABB=ON  77593-49-8/CRN
L35           30 SEA FILE=USPATFULL SPE=ON  ABB=ON  L3
L41        35373 SEA FILE=USPATFULL SPE=ON  ABB=ON  OBES? OR ANTIOBES?
L42        15947 SEA FILE=USPATFULL SPE=ON  ABB=ON  APPETITE
L43        15534 SEA FILE=USPATFULL SPE=ON  ABB=ON  ADIPOS?
L44          332 SEA FILE=USPATFULL SPE=ON  ABB=ON  CORPULEN?
L45       148890 SEA FILE=USPATFULL SPE=ON  ABB=ON  (BODY OR CONTROL)(2A)
                 WEIGHT
L46         6213 SEA FILE=USPATFULL SPE=ON  ABB=ON  OVERWEIGHT
L47           25 SEA FILE=USPATFULL SPE=ON  ABB=ON  L35 AND (L41 OR L42 OR L43
                 OR L44 OR L45 OR L46)


=> s l47 not l48
L82            4 L47 NOT L48    L49=INVENTOR SEARCH ANSWER SET

=> d ibib abs kwic 1-4

L82  ANSWER 1 OF 4  USPATFULL on STN
ACCESSION NUMBER:       2008:326235  USPATFULL  Full-text
TITLE:                  METHOD TO PROMOTE HAIR GROWTH AND/OR DELAY OR TREAT
                        HAIR LOSS BY ADMINISTERING A TGF-BETA ANTAGONIST OR
                        INHIBITOR
INVENTOR(S):            Huang, Jung San, St. Louis, MO, UNITED STATES
                        Huang, Shuan Shian, St. Louis, MO, UNITED STATES

                             NUMBER       KIND    DATE
                        ---------------- ------ --------
PATENT INFORMATION:     US 20080286229     A1   20081120
APPLICATION INFO.:      US 2007-939126     A1   20071113  (11)

                               NUMBER        DATE
                        ------------------ --------
PRIORITY INFORMATION:   US 2006-858592P    20061113 (60)
DOCUMENT TYPE:          Utility
FILE SEGMENT:           APPLICATION
LEGAL REPRESENTATIVE:   Elmore Patent Law Group, P.C., 515 Groton Rd., Unit 1R,
                        Westford, MA, 01886, US
NUMBER OF CLAIMS:       16
EXEMPLARY CLAIM:        1
LINE COUNT:             897
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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AB The present invention provides methods for promoting hair growth and/or treating or preventing hair loss (alopecia) by contacting the cells with a TGF-β antagonist or inhibitor either alone or in combination with other alopecia-inhibiting compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM Alopecia may also result from nutritional deficiencies and metabolic defects. Caloric deprivation must be very severe to produce hair loss. Increased shedding sometimes occurs after marked weight loss for obesity. Anemia, diabetes, hyper- and hypovitaminosis, and zinc deficiency may also lead to alopecia.

IT 57-88-5, Cholesterol, biological studies 107-92-6, Butyric acid, biological studies 107-92-6D, Butyric acid, derivs. 363-24-6, Prostaglandin E2 997-20-6D, conjugates with TGF-β peptantagonists 23567-23-9, Procyanidin B-3 25322-68-3D, PEG, conjugates with TGF-β peptantagonists 26791-46-8D, conjugates with TGF-β peptantagonists 32222-06-3, Calcitriol 38304-91-5, Minoxidil 57738-23-5D, conjugates with TGF-β peptantagonists 59865-13-3, Cyclosporine A 62031-54-3, Fibroblast growth factor 62229-50-9, Epidermal growth factor 98319-26-7, Finasteride 106566-58-9 145224-96-0D, conjugates with TGF-β peptantagonists 148348-15-6, Fibroblast growth factor 7
(method to promote hair growth and/or delay or treat hair loss by administering a TGF-β antagonist or inhibitor and combination with other agents)

L82 ANSWER 2 OF 4 USPATFULL on STN

ACCESSION NUMBER:	2008:184191 USPATFULL Full-text
TITLE:	Compositions and methods for treatment of viral diseases
INVENTOR(S):	Johansen, Lisa M., Belmont, MA, UNITED STATES Owens, Christopher M., Cambridge, MA, UNITED STATES Mawhinney, Christina, Jamaica Plain, MA, UNITED STATES Chappell, Todd W., Boston, MA, UNITED STATES Brown, Alexander T., Watertown, MA, UNITED STATES Frank, Michael G., Boston, MA, UNITED STATES Altmeyer, Ralf, Singapore, SINGAPORE

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20080161324	A1	20080703	
APPLICATION INFO.:	US 2007-900893	A1	20070913	(11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-844463P	20060914 (60)
	US 2006-874061P	20061211 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110, US
NUMBER OF CLAIMS:	75
EXEMPLARY CLAIM:	1
LINE COUNT:	7941

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention features compositions, methods, and kits useful in the treatment of viral diseases. In certain embodiments, the viral disease is caused by a single stranded RNA virus, a flaviviridae virus, or a hepatic

virus. In particular embodiments, the viral disease is viral hepatitis (e.g., hepatitis A, hepatitis B, hepatitis C, hepatitis D, hepatitis E). Also featured are screening methods for identification of novel compounds that may be used to treat a viral disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . Enzyme inhibitor
Thromboxane synthase inhibitor
NFκB inhibitor
Anti-inflammatory activity
Possible antineoplastic activity;
antiproliferative effects;
Induction of cell death in colon and
melanoma tumor cells
Induces apoptosis independently of p53
status
Anti-atheroma preparation of natural origin
Dye
Antidiarrheal
Antiemetic
Antifungal
Antiviral
Antineoplastic
Antihemorrhoidal
Antimigraine preparation
Antirheumatic, non-steroidal (NSAID)
Antiseptic and disinfectant
Appetite stimulant
Bile therapy and cholagogues
Cytostatic
Dermatological
Digestives
Hepatic Protector, Lipotropics
Laxative
Musculoskeletal product
Prostatic disease product
Stomach disorder prep
Topical vasoprotective
Wound healing agent

Stanozolol
Anabolic
ergogenic
Androgenic
sports
FSH antagonist
International
DNA-synthesis
Participates in protein-synthesis
Hematopoiesis
Cell reproduction
Essential for growth
Nucleoprotein synthesis
Systemic anabolic
Commonly used as an
Hematological agent
aid; banned substance in
Anabolic steroid
competition by
Protein catabolism. . . in
identical to antianemia-factor in
Anti-anemic product
purified liver extract
Non-narcotic analgesic
Anti-inflammatory enzyme
Musculoskeletal product
Systemic muscle relaxant

Antirheumatic
Physiological role associated with
Systemic antihistamine
Methylation
Neurotonic
Myelin synthesis
Antidepressant
Stomatological
Blood coagulation
Antifibrinolytic
Digestive
Antidiarrheal micro-organisms
Appetite stimulant
Anorectic
Vitamin
Vinorelbine Cytostatics
Tubulin Cytoskeleton
Vinca alkaloid
Antineoplastic
Tubulin destabilizer Antineoplastic agent, phytogenic
Mitotic inhibitor
Radiation-sensitizing agent
Sirolimus Immunosuppressive agent
mTOR mTOR inhibitor
May inhibit human T- and B-
(rapamycin) Antifungal
Immunophilins Blocks cytokine transcription
lymphocyte proliferation
Antineoplastic
Disulfiram Alcohol deterrent
aldehyde dehydrogenase Aldehyde dehydrogenase inhibitor
Acaricide
Drugs used In alcohol dependence. . .

SUMM . . . herein including a hepatitis virus such as hepatitis A, B, C, D, or E) in a clinically relevant manner. A sufficient amount of an active compound used to practice the present invention for therapeutic treatment of conditions caused by a virus varies depending upon the manner of administration, the age, body weight, and general health of the patient. Ultimately, the prescribers will decide the appropriate amount and dosage regimen. Additionally, an effective amount may be an amount of compound in the combination of the invention that is safe and efficacious in the treatment of a patient having a viral disease over each. . .

DETD In the case of hepatitis C, acute symptoms can include jaundice, abdominal pain, fatigue, loss of appetite, nausea, vomiting, low-grade fever, pale or clay-colored stools, dark urine, generalized itching, ascites, and bleeding varices (dilated veins in the esophagus). Hepatitis C can become a chronic infection, which can lead to liver infection and scarring of the liver, which can, in turn, require the patient to undergo a liver. . .

IT 53023-17-9, Suksdorfin 53066-26-5, Lexithromycin 53123-88-9, Sirolimus 53716-50-0, Oxfendazole 53783-83-8, Tromantadine 54965-21-8, Albendazole 54965-24-1, Tamoxifen citrate 55134-13-9, Narasin 55303-98-5, Avarol 55954-61-5, Pseudohypericin 55981-09-4, Nitazoxanide 58569-55-4, Methionine-enkephalin 58581-89-8, Azelastine 58970-76-6, Ubenimex 59277-89-3, Aciclovir 59729-32-7, Citalopram hydrobromide 59789-29-6, Poly ICLC 59865-13-3, Cyclosporine 60050-95-5, NSC 287474 60525-15-7, Zimelidine dihydrochloride 60628-96-8, Bifonazole 60857-08-1, Prostratin 61413-54-5, Rolipram

61718-82-9, Fluvoxamine maleate 62304-98-7, Thymalfasin 62304-98-7D, Thymalfasin, PEGylated 63585-09-1, Foscarnet Sodium 63659-19-8, Betaxolol hydrochloride 63968-64-9, Artemisinin 64224-21-1, Oltipraz 65589-59-5 65646-68-6, Fenretinide 66611-37-8, BGP 15 67526-95-8, Thapsigargin 67700-30-5, R 803 67915-31-5, Terconazole 68238-36-8, Isosulfan blue 68345-70-0 69123-90-6, Fiacitabine 69123-98-4, Fialuridine 69304-47-8, Brivudine 69655-05-6, Didanosine 69655-05-6D, Didanosine, Zidovudine dimers 69839-83-4, Didox 70280-03-4, GMDP 70831-56-0, L-Chicoric acid 71160-24-2, Leukotriene B4 71486-22-1, Vinorelbine 71939-50-9, Dihydroartemisinin 71963-77-4, Artemether 72324-18-6, Stepronin 72559-06-9, Rifabutin 72599-27-0, Miglustat 73573-88-3, Mevastatin 74817-61-1, Murabutide 75330-75-5, Lovastatin 75706-12-6, Leflunomide 77181-69-2, Sorivudine 77372-73-7, 6-Nitroquipazine 77907-69-8, Interferon Alfa-2a 78416-81-6, Trequinsin hydrochloride 78613-38-4, Amorolfine hydrochloride 78842-13-4 79559-97-0, Sertraline hydrochloride 79617-96-2, Sertraline 79794-75-5, Loratadine 79902-63-9, Simvastatin 80621-81-4, Rifaximin 81840-15-5, Vesnarinone 82147-31-7, WR 151327 82410-32-0, Ganciclovir 82640-04-8, Raloxifene hydrochloride 82822-14-8, Mopyridone 83461-56-7, MTP-PE 83546-42-3, FEAU 83919-23-7, Mometasone furoate 83923-14-2, ADS J1 84290-27-7, Tucaresol 84303-06-0, PM 19 84371-65-3, VGX 410 84472-85-5, Navuridine 85233-19-8, 1,2-Bis(2-aminophenoxy)ethane N,N,N',N'-tetraacetic acid 85326-06-3, Dideoxyguanosine 85326-06-3D, Dideoxyguanosine, azido derivs 85465-82-3, Thymotrinan 86903-77-7, C 31G 87190-79-2, CS 92 87857-41-8 88495-63-0, Artesunate 88899-55-2, Bafilomycin A1 89778-26-7, Toremifene 89813-21-8, Adamantylamide dipeptide 90832-70-5, WIN 49611 91421-42-0, Rubitecan 92047-17-1, FL-G 92562-88-4, MIV 210 93253-86-2, DUP 925 93265-81-7, IPdR 93957-54-1, Fluvastatin 93957-55-2, Fluvastatin sodium 94540-23-5, U 78036 95933-74-7, Trimidox 96187-53-0, Brequinar 97123-80-3, Kamizol 98059-61-1 98530-12-2, Interferon -2b 99011-02-6, Imiquimod 99390-76-8, BMY 27709 99751-63-0, AL 721 100241-46-1, R 61837 100286-90-6, Irinotecan hydrochloride 100643-71-8, Desloratadine 100827-28-9, Erbstatin 100986-85-4, Levofloxacin 101347-05-1, JM 1596 102052-95-9, 3-Deazaneplanocin A 102674-90-8, Bellenamine 102805-86-7 102830-69-3, MDL 20610 103024-93-7, Tiviciclovir 103737-56-0, XU 430 103745-39-7, Fasudil 103913-16-2, Oxetanocin 104227-87-4, Famciclovir 104624-98-8, Antineoplaston AS2 1 104880-60-6, SR 3745A 105637-50-1, ML9 106362-32-7, Peptide T 106566-58-9, AS 101 106941-25-7, Adefovir 107421-16-9, NSC 158393 107489-37-2, Thymoctonan 107753-78-6, Zafirlukast 107868-30-4, Exemestane 109091-47-6 109093-57-4 110042-95-0, Acemannan 110078-40-5, JM 2763 110078-46-1, Plerixafor 110143-10-7, Lodenosine 110942-02-4, Aldesleukin 111393-84-1, Amitivir 111393-93-2, LY 253963 112190-24-6, U 75875 112885-42-4, Mosapride citrate 113852-37-2, Cidofovir 113852-41-8, PMEDAP 114246-76-3, NSC 620055 114627-30-4, TEI 2306 114719-57-2, Fascaplysin 115344-47-3, Siguazodan 115743-28-7, Curdlan sulfate 116249-65-1, Benanomicin A 116649-85-5, Ramatroban 116680-01-4, CellCept 117704-65-1, Pradimicin A 118353-05-2, Carbovir 118390-30-0, Interferon alfacon-1 118409-57-7, Tyrphostin 23 118409-58-8, Tyrphostin 25 118409-59-9, Tyrphostin 46 118409-60-2, Tyrphostin 47 119413-54-6, Topotecan hydrochloride 119567-79-2, Taribavirin 119644-22-3, Raluridine 120011-70-3, Donepezil hydrochloride 120210-48-2, Tenidap 120586-49-4, NSC 624151 121104-96-9, Celgosivir 121154-51-6, L-DdC 122111-03-9, Gemcitabine hydrochloride 122320-73-4, Rosiglitazone 122970-35-8, SK 034 122970-40-5, Isatoribine 123027-56-5, HEPT 123027-69-0, GR 92938X 123391-12-8, MDL 101028 123774-72-1, Sargramostim 124265-89-0,

Omaciclovir 124351-85-5, Incadronic acid 124436-59-5, Pirodavir 124832-26-4, Valaciclovir 124930-59-2, Phosphazid 124937-52-6, Tolterodine tartrate 125372-33-0, Dacopafant 126103-94-4, U 81749 126320-77-2, R 82150 126347-69-1, R 82913 126595-07-1, Propagermanium 127759-89-1, Lobucavir 128075-79-6, Lufironil 128794-94-5, Mycophenolate mofetil 129297-22-9, Kijimicin 129453-61-8, Fulvestrant 129467-45-4, A 74704 129580-63-8, Satraplatin 129618-40-2, Nevirapine 130108-72-4 130112-42-4, Mivotilate 130717-51-0, FR 122047 130729-68-9, PM 104 131262-82-3, SC 49483 131707-23-8, Arbidol 133432-71-0, Peldesine 133550-30-8, AG490 133550-34-2, AG 555 133550-35-3, AG-494 133898-83-6, LY 214624 134379-77-4, Dexelvucitabine 134499-06-2, Silipide 134523-00-5, Atorvastatin 134633-29-7, Tecogalan sodium 134678-17-4, Lamivudine 134678-17-4D, Lamivudine, Phosphatidyl derivs. 134878-17-4, A 77003 135062-02-1, Repaglinide 135295-27-1 135525-71-2, L 696229 135525-77-8, L 697639 135525-78-9, L 697661 135812-04-3, NSC 615985 135812-34-9, UC 38 136194-77-9, GO 6976 136279-32-8, Teceleukin 136449-85-9, NPC 15437 136458-97-4, MS 8209 136470-78-5, Abacavir 136816-75-6, Atevirdine 136817-59-9, Delavirdine 137332-54-8, Tivirapine 137487-62-8, Alvircept sudotox 137893-48-2, Michellamine B 138069-52-0, Ukrain 138483-63-3, L 689502 138660-96-5, Sevirumab
(compns. and methods for treatment of viral diseases)

L82 ANSWER 3 OF 4 USPATFULL on STN

ACCESSION NUMBER:	2005:196895 USPATFULL Full-text		
TITLE:	Therapeutic combinations		
INVENTOR(S):	Hammond, Jennifer Lou, San Diego, CA, UNITED STATES Patick, Amy Karen, Escondido, CA, UNITED STATES		
PATENT ASSIGNEE(S):	Agouron Pharmaceuticals, Inc. (U.S. corporation)		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20050171038	A1	20050804
APPLICATION INFO.:	US 2005-46260	A1	20050128 (11)
	NUMBER	DATE	
PRIORITY INFORMATION:	US 2004-540749P	20040130 (60)	
	US 2004-615000P	20041001 (60)	
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	AGOURON PHARMACEUTICALS, INC., 10777 SCIENCE CENTER DRIVE, SAN DIEGO, CA, 92121, US		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
LINE COUNT:	2198		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods for treating an HIV infection a mammal by administering to the mammal a therapeutically effective amount of a combination of compounds. The present invention also relates to compositions comprising certain compounds useful as inhibitors of the HIV protease enzyme and at least one additional therapeutic agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . administration, the particular site, the host, and the condition being treated. Optimal dosages for a given set of conditions can be ascertained by those skilled in the art using conventional dosage-determination tests. For oral administration, e.g., a dose that may be employed is from about 0.001 to about 1000 mg/kg body

weight, preferably from about 0.1 to about 100 mg/kg body weight, and even more preferably from about 1 to about 50 mg/kg body weight, with courses of treatment repeated at appropriate intervals.

IT 148-18-5, Imuthiol 3056-17-5, Stavudine 4591-73-5, AG 148 7440-70-2, Calcium, biological studies 7481-89-2, Zalcitabine 25526-93-6, Alovudine 30516-87-1, AZT 56741-95-8, Bropirimine 58569-55-4, 1-5-Adrenorphin (human) 69558-55-0, Thymopentin 69655-05-6, Didanosine 81541-26-6, CL 246738 92562-88-4, MIV-210 106566-58-9 110042-95-0, Acemannan 110143-10-7 127779-20-8, Saquinavir 129618-40-2, Nevirapine 134379-77-4, Reverset 134678-17-4, 3TC 134878-17-4, A 77003 136470-78-5, Abacavir 136817-59-9, Delavirdine 141732-75-4, EL 10 (pharmaceutical) 142217-69-4, Entecavir 142632-32-4 143491-57-0, Emtricitabine 145514-04-1, Amdoxovir 147127-20-6, Tenofovir 147318-81-8, KNI-272 150378-17-9, Indinavir 153314-49-9, LP-130 154598-52-4, Efavirenz 154612-39-2, Palinavir 155073-99-7, DG 35-VIII 155148-31-5, AMD-3100 155213-67-5, Ritonavir 159519-65-0, Enfuvirtide 159989-64-7, Nelfinavir 160707-68-6 160707-69-7, SPD 754 161302-38-1, BMS 182193 161302-40-5, BMS 186318 161814-49-9, Amprenavir 163451-80-7, HBY-097 170020-61-8, FP-21399 174484-41-4, U-140690 174562-62-0, LB 71262 175385-62-3, CGP 61755 177932-89-7, DMP 450 178979-85-6, Capravirine 179402-61-0, GS 3333 180302-29-8, DMP 850 181785-84-2 184955-03-1, KNI-413 186538-00-1, JE 2147 192725-17-0, Lopinavir 198904-31-3, CGP 73547 204907-85-7 206361-99-1, TMC 114 206362-00-7, UIC 94003 209804-40-0 209804-40-0D, derivs. 214287-88-4, DPC 961 214287-99-7, DPC 083 216863-66-0, L-756423 226700-79-4, Fosamprenavir 229005-80-5, TAK 779 244767-67-7, Dapivirine 269055-15-4, Etravirine 282104-12-5, PD 178390 284661-68-3, DPC-681 284661-73-0, DPC-684 288399-76-8, KNI 1039 339177-61-6, AD 439 339177-63-8, AD 519 352234-06-1, AG 1776 369372-47-4, Kaletra 376348-65-1, UK 427857 379270-37-8, GS 7340 394728-76-8, TMC 120 394729-61-4, LG 71350 394729-90-9, PD 173606 394729-94-3, PD 177298 394730-00-8, PD 178392 394730-01-9, MK 944 394730-25-7, SC 351125 394730-30-4, SCH-D 461443-59-4, GW 873140 612547-11-2 675184-03-9, VX 385 854285-08-8, T-1249 862009-46-9, BCH 13520 862009-62-9, GW 678248 862009-64-1, GW 695634 862009-84-5, GW 5950X 862009-87-8, R 944 862009-92-5, Ro 03-34649 862009-93-6, GS 224338 862009-95-8, SM 309515 862009-97-0, RS 344

(combination therapy agent; compns. comprising an amino acid amide HIV protease inhibitor)

L82 ANSWER 4 OF 4 USPATFULL on STN

ACCESSION NUMBER:	2004:141178 USPATFULL Full-text
TITLE:	Methods for treating and preventing alopecia
INVENTOR(S):	Rodgers, Kathleen E., Long Beach, CA, United States DiZerega, Gere S., Los Angeles, CA, United States
PATENT ASSIGNEE(S):	University of Southern California, Los Angeles, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6747008	B1	20040608	
APPLICATION INFO.:	US 2000-723255		20001127	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-212608P	20000619	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED

PRIMARY EXAMINER: Tate, Christopher
ASSISTANT EXAMINER: Chism, B. Dell
LEGAL REPRESENTATIVE: McDonnell Boehnen Hulbert & Berghoff
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1133
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides improved methods, kits, and pharmaceutical compositions for treating and preventing alopecia in a subject in need thereof by administering an effective amount of angiotensinogen, angiotensin I (AI), AI analogues, AI fragments and analogues thereof, angiotensin II (AII), AII analogues, AII fragments or analogues thereof or AII AT.sub.2 type 2 receptor agonists to the subject.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM Alopecia may also result from nutritional deficiencies and metabolic defects. Caloric deprivation must be very severe to produce hair loss. Increased shedding sometimes occurs after marked weight loss for obesity. Anemia, diabetes, hyper- and hypovitaminosis, and zinc deficiency may also lead to alopecia.

DETD . . . factors, including the age, weight, sex, medical condition of the individual, the severity of the condition, the route of administration, and the particular compound employed. Thus, the dosage regimen may vary widely, but can be on the order of between 0.1 ng/kg and 10 mg/kg of the active agents per body weight are useful for all methods of use disclosed herein, preferably between about 10 ng/kg and 1 mg/kg, more preferably between about 0.1 μg/kg and 200 μg/kg, and most preferably between about 1 μg/kg and 100 μg/kg. For example, treatment of alopecia using the composition may be accomplished by subcutaneous or. . .

IT 107-92-6, Butyric acid, biological studies 107-92-6D, Butyric acid, derivs. 363-24-6, Prostaglandin E2 32222-06-3, Calcitriol 59865-13-3, Cyclosporine A 62031-54-3, Fibroblast growth factor 62229-50-9, Epidermal growth factor 106566-58-9
(methods for treating and preventing alopecia using angiotensinogen, angiotensin I, angiotensin II, analogs and fragments and AT2 receptor agonists in combination with other agents)

```
=> fil medl
FILE 'MEDLINE' ENTERED AT 14:49:16 ON 12 JUN 2009

 FILE LAST UPDATED: 11 Jun 2009 (20090611/UP).  FILE COVERS 1949 TO DATE.

 MEDLINE and LMEDLINE have been updated with the 2009 Medical Subject
 Headings (MeSH) vocabulary and tree numbers from the U.S.  National Library
 of Medicine (NLM).  Additional information is available at

 http://www.nlm.nih.gov/pubs/techbull/nd08/nd08_medline_data_changes_2009.html.

 On February 21, 2009, MEDLINE was reloaded.  See HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

 See HELP RANGE before carrying out any RANGE search.

=> d que l56; fil embase; d que l69
L50         111 SEA FILE=MEDLINE SPE=ON  ABB=ON  AS101 OR AS(W)101 OR OSSIRENE

L51       91302 SEA FILE=MEDLINE SPE=ON  ABB=ON  OBESITY+NT/CT
L52        1782 SEA FILE=MEDLINE SPE=ON  ABB=ON  ANTI-OBESITY AGENTS/CT
L53        3421 SEA FILE=MEDLINE SPE=ON  ABB=ON  APPETITE DEPRESSANTS/CT
L54      265223 SEA FILE=MEDLINE SPE=ON  ABB=ON  BODY WEIGHT+NT/CT
L55        4543 SEA FILE=MEDLINE SPE=ON  ABB=ON  APPETITE/CT
L56           2 SEA FILE=MEDLINE SPE=ON  ABB=ON  L50 AND (L51 OR L52 OR L53 OR
                 L54 OR L55)



FILE 'EMBASE' ENTERED AT 14:49:29 ON 12 JUN 2009
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 FILE COVERS 1974 TO 12 Jun 2009 (20090612/ED)

 EMBASE was reloaded on March 30, 2008.

 EMBASE is now updated daily.  SDI frequency remains weekly (default)
 and biweekly.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

 Beginning January 2008, Elsevier will no longer provide EMTREE
 codes as part of the EMTREE thesaurus in EMBASE.  Please update
 your current-awareness alerts (SDIs) if they contain EMTREE
 codes.

 For further assistance, please contact your local helpdesk.


L3            4 SEA FILE=REGISTRY SPE=ON  ABB=ON  77593-49-8/CRN
L57         124 SEA FILE=EMBASE SPE=ON  ABB=ON  L3
L63      106808 SEA FILE=EMBASE SPE=ON  ABB=ON  OBESITY+NT/CT
L64        5830 SEA FILE=EMBASE SPE=ON  ABB=ON  APPETITE/CT
L65       28614 SEA FILE=EMBASE SPE=ON  ABB=ON  WEIGHT GAIN/CT
L66      167489 SEA FILE=EMBASE SPE=ON  ABB=ON  BODY WEIGHT+NT/CT
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L67        1324 SEA FILE=EMBASE SPE=ON  ABB=ON  ANTIOBESITY AGENT/CT
L68        1944 SEA FILE=EMBASE SPE=ON  ABB=ON  ANOREXIGENIC AGENT/CT
L69           1 SEA FILE=EMBASE SPE=ON  ABB=ON  L57 AND (L63 OR L64 OR L65 OR
                L66 OR L67 OR L68)


=> fil drugu biotechno ipa biosis; d que l79; dup rem l56,l79,l69
FILE 'DRUGU' ENTERED AT 14:49:49 ON 12 JUN 2009
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FILE 'BIOSIS' ENTERED AT 14:49:49 ON 12 JUN 2009
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L3             4 SEA FILE=REGISTRY SPE=ON  ABB=ON  77593-49-8/CRN
L70          205 SEA L3
L71          216 SEA AS101 OR AS(W) 101 OR OSSIRENE
L72       125867 SEA OBES? OR ANTIOBES?
L73        20333 SEA APPETITE
L74       251660 SEA (WEIGHT(2A)(CONTROL OR BODY OR GAIN))
L75         1112 SEA ANOREXIGENIC#
L76        15199 SEA OVERWEIGHT
L77        60269 SEA ADIPOS?
L78          576 SEA CORPULEN?
L79            3 SEA (L70 OR L71) AND (L72 OR L73 OR L74 OR L75 OR L76 OR L77
                OR L78)



FILE 'MEDLINE' ENTERED AT 14:49:49 ON 12 JUN 2009

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PROCESSING COMPLETED FOR L56
PROCESSING COMPLETED FOR L79
PROCESSING COMPLETED FOR L69
L83            4 DUP REM L56 L79 L69 (2 DUPLICATES REMOVED)
                 ANSWERS '1-2' FROM FILE MEDLINE
                 ANSWER '3' FROM FILE DRUGU
                 ANSWER '4' FROM FILE BIOSIS

=> d iall 1-4; fil hom

L83  ANSWER 1 OF 4     MEDLINE on STN                    DUPLICATE 1
ACCESSION NUMBER:   1990055821     MEDLINE  Full-text
DOCUMENT NUMBER:    PubMed ID: 2818203
TITLE:              Toxicity study in rats of a tellurium based
                    immunomodulating drug, AS-101: a
```

potential drug for AIDS and cancer patients.
AUTHOR: Nyska A; Waner T; Pirak M; Albeck M; Sredni B
CORPORATE SOURCE: Life Science Research Israel, Ness Ziona.
SOURCE: Archives of toxicology, (1989) Vol. 63, No. 5, pp. 386-93.
Journal code: 0417615. ISSN: 0340-5761.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; AIDS
ENTRY MONTH: 198912
ENTRY DATE: Entered STN: 28 Mar 1990
Last Updated on STN: 3 Feb 1997
Entered Medline: 13 Dec 1989

ABSTRACT:
Male and female Sprague Dawley rats were injected intraperitoneally for 4 weeks with ammonium trichloro (dioxyethylene-0-0'-) tellurate, an immunomodulating drug at doses ranging from 3 to 24 mg/kg/week. Routine laboratory examinations included body weight, food consumption, clinical chemistry and hematological examinations. At termination of the experiment, all rats were sacrificed and subjected to a detailed necropsy. Few mortalities were recorded during the course of the study. Clinical signs included hind limb paresis and paraphimosis. A garlic odor pervaded the room. Body weight and food consumption were adversely affected in a dose-related manner. Effects were elicited on the hematological system; changes being noted in the platelet and leukocyte counts as well. Clinical chemistry evaluation revealed signs of hepatoxicity, especially in the female treated groups. The level of beta-globulin was increased. At necropsy organs were found to have a grayish-blue discoloration. Tellurium related histopathological changes were observed in the eyes, liver, thymus, bone marrow, heart and kidneys. An attempt has been made to compare the toxicity of this drug with other tellurium-containing compounds. A good correlation was found. Novel effects of the drug were retinopathy and replacement of bone marrow by bony or fibrous tissue. The possibility that some of the effects may have been elicited due to selenium-vitamin E deficiency has been considered.

CONTROLLED TERM: Check Tags: Female; Male
Acquired Immunodeficiency Syndrome: DT, drug therapy
Adjuvants, Immunologic: TU, therapeutic use
*Adjuvants, Immunologic: TO, toxicity
Animals
*Antineoplastic Agents: TO, toxicity
Blood Chemical Analysis
Body Weight: DE, drug effects
Bone Marrow: PA, pathology
Eating: DE, drug effects
Ethylenes
Injections, Intraperitoneal
Osteoporosis: CI, chemically induced
Rats
Rats, Inbred Strains
Retina: PA, pathology
Spleen: PA, pathology
*Tellurium: TO, toxicity
CAS REGISTRY NO.: 13494-80-9 (Tellurium)
CHEMICAL NAME: 0 (Adjuvants, Immunologic); 0 (Antineoplastic Agents); 0 (Ethylenes); 0 (ammonium trichloro(dioxoethylene-O,O'-)tellurate)

L83 ANSWER 2 OF 4 MEDLINE on STN
ACCESSION NUMBER: 2002073030 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 11798541

TITLE: The clinical significance of true insulin and proinsulin levels in subjects with different glucose tolerance.
AUTHOR: Yang J; Li M; Wu C
CORPORATE SOURCE: Department of Endocrinology, The First Affiliated Hospital of Shanxi Medical University, Taiyuan 030001, China.
SOURCE: Zhonghua nei ke za zhi [Chinese journal of internal medicine], (2000 Dec) Vol. 39, No. 12, pp. 811-3. Journal code: 16210490R. ISSN: 0578-1426.
PUB. COUNTRY: China
DOCUMENT TYPE: (ENGLISH ABSTRACT) Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LANGUAGE: Chinese
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200307
ENTRY DATE: Entered STN: 25 Jan 2002
Last Updated on STN: 11 Dec 2002
Entered Medline: 10 Jul 2003

ABSTRACT:
OBJECTIVE: To examine the levels of serum true insulin (TI) and proinsulin (PI) in individuals with different glucose tolerance and to assess its clinical significance. METHODS: The levels of true insulin and proinsulin during oral glucose tolerance test (OGTT) were determined with specific BA-ELISA in 135 normal glucose tolerance (NGT) and 86 impaired glucose tolerance (IGT) subjects as well as 101 type II diabetes mellitus (DM) patients.
RESULTS: The fasting TI levels showed no significant difference (P > 0.05) among the groups of NGT, IGT and type II DM, but the immunoreactive insulin (IRI) concentration increased significantly in type II DM patients as compared with that in NGT (P < 0.01). Both of the fasting PI levels and the ratio of PI/(PI + TI) were significantly higher in type II DM patients as compared with those in NGT or IGT. The area under the curve of TI (AUC(TI)) was significantly higher (P < 0.05) in IGT than NGT and type II DM. Obese subjects had higher TI levels (P < 0.01) and lower insulin sensitivity (P < 0.05) than those in non-obese, while the ratio of PI/(PI + TI) and AUC(TI) was not significantly different statistically (P > 0.05) between the obese and non-obese subjects. CONCLUSION: Type II DM patients present hyperproinsulinemia rather than hyperinsulinemia and have higher ratio of PI/(PI + TI) as compared with NGT and IGT subjects. Higher TI level and significant insulin resistance were observed in obese subjects, but there is no difference of the PI/(PI + TI) ratio. The fasting PI level and PI/(PI + TI) ratio tend to be the indexes of beta-cell dysfunction.

CONTROLLED TERM: Check Tags: Female; Male
Adult
Aged
Glucose Tolerance Test
Humans
*Insulin: BL, blood
Islets of Langerhans: PH, physiology
Middle Aged
Obesity: BL, blood
*Proinsulin: BL, blood
CAS REGISTRY NO.: 11061-68-0 (Insulin); 9035-68-1 (Proinsulin)

L83 ANSWER 3 OF 4 DRUGU COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 1993-44062 DRUGU P S Full-text
TITLE: Immunomodulator Effects on the Friend Virus Infection in Genetically Defined Mice.
AUTHOR: Sidwell R W; Morrey J D; Okleberry K M; Burger R A; Warren R P
LOCATION: Logan, Utah, United States

SOURCE: Ann.N.Y.Acad.Sci. (685, 432-46, 1993) 4 Fig. 5 Tab. 40 Ref.
CODEN: ANYAA9 ISSN: 0077-8923
AVAIL. OF DOC.: Institute for Antiviral Research, Utah State University, Logan, Utah 84322-5600, U.S.A.
LANGUAGE: English
DOCUMENT TYPE: Journal

ABSTRACT:

I.p. imexon (IX, Boehr.Mannheim), 1:2 divinyl ether-maleic anhydride cyclic copolymer (MVE-2, NSC-46015, Hercules), human recombinant IFN-alpha A/D (Roche), AS-101 (Am.Home-Products), poly I:poly C12u (Ampligen, Hem-Res.), s.c. Immunoferon (AM-3, Andromaco), i.p. oxamisole (Fisons), ImuVert (CellTech) and p.o. and i.p. bropirimine (BM, Upjohn) had inhibitory effects on Friend virus (FV) infection in mice. IX was the most effective; BM was the least effective and appeared to enhance FV disease with some treatment regimens. MVE-2, IFN-alpha, and AS-101 were well tolerated; weight loss occurred with IX. Some of these immunomodulators may have potential value in the treatment of HIV disease, but caution should be exercised in their clinical use. (congress).

SECTION HEADING: P Pharmacology
S Adverse Effects

CLASSIF. CODE: 20 Immunological
34 Toxicology
50 Biological Response Modifiers
73 Trial Preparations

CONTROLLED TERM:

INFECTION,VIRUS *OC; FRIEND-VIRUS *FT; IMMUNOSTIMULANT *FT; IN-VIVO *FT; MOUSE *FT; LEUKOVIRUS *FT; VIRUS *FT; ONCOVIRUS *FT; LAB.ANIMAL *FT

[01] IMEXON *PH; IMEXON *AE; BOEHR.MANNHEIM *FT; WEIGHT-LOSS *AE; BODY-WEIGHT *AE; IMEXON *RN; I.P. *FT; TOX. *FT; NAT.KILLER-CELL *FT; INJECTION *FT; LYMPHOCYTE *FT; IMMUNOSTIMULANTS *FT; PH *FT; AE *FT

CAS REGISTRY NO.: 59643-91-3

[02] NSC-46015 *PH; HERCULES *FT; NSC46015 *RN; I.P. *FT; NAT.KILLER-CELL *FT; INJECTION *FT; LYMPHOCYTE *FT; INTERFERON-INDUCERS *FT; TRIAL-PREP. *FT; PH *FT

CAS REGISTRY NO.: 27100-68-1

[03] INTERFERON-ALPHA-2-1-HUMAN *PH; ROCHE *FT; INTERA21H *RN; I.P. *FT; RECOMBINANT *FT; NAT.KILLER-CELL *FT; INJECTION *FT; LYMPHOCYTE *FT; IMMUNOSTIMULANTS *FT; VIRUCIDES *FT; CYTOSTATICS *FT; PH *FT

[04] AS-101 *PH; AM.HOME-PRODUCTS *FT; AS-101 *RN; I.P. *FT; NAT.KILLER-CELL *FT; INJECTION *FT; LYMPHOCYTE *FT; IMMUNOSTIMULANTS *FT; CYTOSTATICS *FT; TRIAL-PREP. *FT; PH *FT

CAS REGISTRY NO.: 106566-58-9

[05] POLY-I-C-12-U *PH; AMPLIGEN *PH; HEM-RES. *FT; POLYIC12U *RN; I.P. *FT; INJECTION *FT; CYTOSTATICS *FT; INTERFERON-INDUCERS *FT; IMMUNOSTIMULANTS *FT; PH *FT

[06] AM-3 *PH; IMMUNOFERON *PH; ANDROMACO *FT; AM-3 *RN; S.C. *FT; INJECTION *FT; TRIAL-PREP. *FT; IMMUNOSTIMULANTS *FT; PH *FT

CAS REGISTRY NO.: 87139-86-4

[07] OXAMISOLE *PH; FISONS *FT; OXAMISOLE *RN; I.P. *FT; INJECTION *FT; IMMUNOSTIMULANTS *FT; PH *FT

CAS REGISTRY NO.: 99258-56-7

[08] IMUVERT *PH; CELLTECH *FT; IMUVERT *RN; I.P. *FT; INJECTION *FT; CYTOSTATICS *FT; IMMUNOSTIMULANTS *FT; PH *FT
[09] BROPIRIMINE *PH; BROPIRIMINE *AE; UPJOHN *FT; INFECTION,VIRUS *AE; BROPIRIMI *RN; I.P. *FT; P.O. *FT; TOX. *FT; EXACERBATION *FT; INJECTION *FT; INTERFERON-INDUCERS *FT; VIRUCIDES *FT; CYTOSTATICS *FT; IMMUNOSTIMULANTS *FT; PH *FT; AE *FT
CAS REGISTRY NO.: 56741-95-8
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

L83 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN
ACCESSION NUMBER: 1993:120308 BIOSIS Full-text
DOCUMENT NUMBER: PREV199395064408
TITLE: The effect of AS101 on the reconstitution of T-cell reactivity following irradiation or cyclophosphamide treatment.
AUTHOR(S): Kalechman, Yona; Sotnik-Barkai, Iris; Albeck, Michael; Sredni, Benjamin [Reprint author]
CORPORATE SOURCE: C.A.I.R. Inst., Dep. Life Sciences, Bar Ilan Univ., Ramat Gan 52900, Israel
SOURCE: Experimental Hematology (Charlottesville), (1992) Vol. 20, No. 11, pp. 1302-1308.
CODEN: EXHMA6. ISSN: 0301-472X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Feb 1993
Last Updated on STN: 17 Apr 1993

ABSTRACT: AS101 (ammonium trichloro(dioxyethylene-O-O')tellurate) is a new synthetic compound previously described by us as having immunomodulating properties and minimal toxicity. Phase II clinical trials are currently in progress with AS101 on cancer patients. AS101 has been recently found to have both radioprotective and chemoprotective effects on hemopoiesis of irradiated mice or mice treated with cyclophosphamide (CYP). In this study the effect of AS101 on the recovery of the immune system from sublethal irradiation or CYP treatment was assessed. Mice were injected once with AS101 24 h before being irradiated with 450 cGy or treated with 250 mg/kg body weight CYP. At various time points after treatment the functional capacity of the immune system was determined. It was found that AS101 could significantly reduce the decrease in the number of spleen cells and thymocytes, the decrease in the proliferation rate of these cells to the T-cell mitogen concanavalin A, and the decrease of interleukin 2 secretion by spleen cells. AS101 could initially protect these functions because they were increased over control levels immediately 24 h after treatment. AS101 was also shown to normalize the distribution of T-cell subsets that was impaired following both treatments. These results suggest an immunoregulatory role for AS101 in counteracting chemotherapy and radiation-induced immunological suppression as well as its usefulness as an adjunct treatment of cancer when used in combination with CYP or irradiation.

CONCEPT CODE: Cytology - Animal 02506
Radiation biology - Radiation effects and protective measures 06506
Biochemistry studies - General 10060
Pathology - Therapy 12512
Blood - Blood cell studies 15004
Blood - Blood, lymphatic and reticuloendothelial pathologies 15006
Blood - Lymphatic tissue and reticuloendothelial system 15008

Pharmacology - Clinical pharmacology 22005
Neoplasms - Therapeutic agents and therapy 24008
Neoplasms - Blood and reticuloendothelial neoplasms 24010
Immunology - Immunopathology, tissue immunology 34508

INDEX TERMS: Major Concepts
Blood and Lymphatics (Transport and Circulation); Cell Biology; Immune System (Chemical Coordination and Homeostasis); Radiation Biology; Tumor Biology

INDEX TERMS: Chemicals & Biochemicals
AS101; CYCLOPHOSPHAMIDE; AMMONIUM

INDEX TERMS: Miscellaneous Descriptors
AMMONIUM TRICHLORO(DIOXYETHYLENE-O-O') TELLURATE; ANTINEOPLASTIC-DRUG; CHEMOPROTECTION; HEMATOLOGIC MALIGNANCY; IMMUNE SYSTEM; RADIOPROTECTION

ORGANISM: Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
mice
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates

REGISTRY NUMBER: 98-50-0Q (AS101)
57608-01-2Q (AS101)
106566-58-9Q (AS101)
50-18-0 (CYCLOPHOSPHAMIDE)
14798-03-9 (AMMONIUM)

FILE 'HOME' ENTERED AT 14:49:58 ON 12 JUN 2009

TEXT SEARCH PART 2

```
=> => fil capl; d que nos l33
FILE 'CAPLUS' ENTERED AT 14:51:09 ON 12 JUN 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 12 Jun 2009  VOL 150 ISS 25
FILE LAST UPDATED: 11 Jun 2009  (20090611/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Feb 2009

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE


L3             4 SEA FILE=REGISTRY SPE=ON  ABB=ON  77593-49-8/CRN
L5            97 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L3
L25           89 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L5(L)(THU OR BAC OR PAC OR
                 PKT OR DMA)/RL OR (L5 AND PHARMAC?/SX,SC) ROLES: THU=THERAPEUTIC
USE; BAC=BIOLOGICAL ACTIVITY; PAC=PHARMACOLOGIC ACTIVITY; PKT=PHARMACOKINETICS;
DMA=DRUG MECHANISM OF ACTION
L26           26 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L25 AND PATENT/DT
L27            1 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L25 AND REVIEW/DT
L28           63 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L25 NOT L26
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L31           15 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L26 AND (PD<20030612 OR
                 PRD<20030612 OR AD<20030612)
L33           59 SEA FILE=HCAPLUS SPE=ON  ABB=ON  (L31 OR L30 OR L27)


=> => fil hcapl; d que nos l33
FILE 'HCAPLUS' ENTERED AT 14:51:31 ON 12 JUN 2009
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FILE COVERS 1907 - 12 Jun 2009 VOL 150 ISS 25
FILE LAST UPDATED: 11 Jun 2009 (20090611/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

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L3            4 SEA FILE=REGISTRY SPE=ON  ABB=ON  77593-49-8/CRN
L5           97 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L3
L25          89 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L5(L)(THU OR BAC OR PAC OR
                PKT OR DMA)/RL OR (L5 AND PHARMAC?/SX,SC)
L26          26 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L25 AND PATENT/DT
L27           1 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L25 AND REVIEW/DT
L28          63 SEA FILE=HCAPLUS SPE=ON  ABB=ON  L25 NOT L26
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=> s l33 not l23,l34
L84          59 L33 NOT (L23 OR L34)        L23,L34 WERE PREVIOUSLY PRINTED

=> d ibib abs hitind l84 1-59; fil hom

L84  ANSWER 1 OF 59  HCAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2003:417763  HCAPLUS  Full-text
DOCUMENT NUMBER:          139:12269
TITLE:                    Cytokine-inducing tellurium complex Biologically
                          active complex
INVENTOR(S):              Albeck, Michael; Sredni, Benjamin
PATENT ASSIGNEE(S):       Biomas Ltd., Israel
SOURCE:                   PCT Int. Appl., 32 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
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     WO 2003044038         A2    20030530    WO 2002-IL936           20021124 <--
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     WO 2003044038         A3    20040318
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2467926            A1    20030530    CA 2002-2467926         20021124 <--
     AU 2002343197         A1    20030610    AU 2002-343197          20021124 <--
     EP 1455682            A2    20040915    EP 2002-779867          20021124 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
     US 20050004091        A1    20050106    US 2004-496729          20040521 <--
     US 7276628            B2    20071002
     US 20090054391        A1    20090226    US 2007-898290          20070911 <--
PRIORITY APPLN. INFO.:                       IL 2001-146694      A   20011122 <--
                                             WO 2002-IL936       W   20021124 <--
                                             US 2004-496729      A1  20040521
OTHER SOURCE(S):         MARPAT 139:12269
AB    The invention relates to an aqueous solution containing at least one species
      selected from the group consisting of a 1:1 M complex of TeO2 with a moiety of
      formula (A) and ammonium salts thereof: HO-X-OH (A) where X is an optionally
      substituted divalent saturated hydrocarbon group containing 2-8 carbon atoms
      in the chain connecting the two OH groups, and its use for stimulating cells
      to produce cytokines and for treating mammalian diseases and conditions
      responsive to increased production of cytokines.  The complex may be used also
      for treating mammalian cancer which is not responsive to increased production
      of cytokines.
IC    ICM  C07K
CC    63-6 (Pharmaceuticals)
      Section cross-reference(s): 1, 15
IT    106444-33-1P 106566-58-9P
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
         (cytokine-inducing tellurium complex Biol. active complex)
REFERENCE COUNT:         1     THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84  ANSWER 2 OF 59  HCAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:        2002:830252  HCAPLUS  Full-text
DOCUMENT NUMBER:         137:320341
TITLE:                   Method using tellurium compounds for treating
                         psoriasis
INVENTOR(S):             Albeck, Michael; Sredni, Benjamin
PATENT ASSIGNEE(S):      Biomas Inc., Israel
SOURCE:                  U.S., 6 pp.
                         CODEN: USXXAM
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     US 6472381            B1    20021029    US 2001-975792          20011012 <--
PRIORITY APPLN. INFO.:                       US 2001-975792          20011012 <--
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OTHER SOURCE(S): MARPAT 137:320341
AB The invention comprises the administration of an effective amount of a tellurium compound to a patients who is afflicted with psoriasis. The tellurium compound is administered either systemically or topically to one who is afflicted with psoriasis in an amount which is effective to alleviate the symptoms of psoriasis.
IC ICM A61K031-615
ICS A61K031-605; A61K031-28
INCL 514162000
CC 1-12 (Pharmacology)
IT 7446-07-3, Tellurium dioxide 13494-80-9D, Tellurium, complexes 29510-67-6 106566-59-9
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tellurium compds. for treatment of psoriasis)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 3 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:506121 HCAPLUS Full-text
DOCUMENT NUMBER: 137:108044
TITLE: Anti-IL-10 therapeutic strategy using the immunomodulator AS101 in protecting mice from sepsis-induced death: dependence on timing of immunomodulating intervention
AUTHOR(S): Kalechman, Yona; Gafter, Uzi; Gal, Rivka; Rushkin, Galit; Yan, Donghong; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: C.A.I.R. Institute, Faculty of Life Sciences, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: Journal of Immunology (2002), 169(1), 384-392
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The role of IL-10 in exptl. sepsis is controversial. The nontoxic immunomodulator, ammonium trichloro(dioxoethylene-o,o')tellurate (AS101) has been previously shown to inhibit IL-10 expression at the transcriptional level. In this study, we show that in mice subjected to cecal ligation and puncture (CLP), treatment with AS101 12 h after, but not before, CLP significantly increased survival of septic mice. This was associated with a significant decrease in serum IL-10 and in IL-10 secretion by peritoneal macrophages 24-48 h after CLP. At that time, the ability of these cells to secrete TNF-α and IL-1β was restored in AS101-treated mice. The increased survival of AS101-treated mice was due to the inhibition of IL-10, since cotreatment with murine rIL-10 abolished the protective activity of AS101. AS101 increased class II Ag expression on peritoneal macrophages, severely depressed in control mice, while it did not affect the expression of class I Ags. This was accompanied by a significant elevation in the level of IFN-γ secreted by splenocytes. Moreover, AS101 ameliorated bacterial clearance in the peritoneum and blood and decreased severe multiple organ damage, as indicated by clin. chemical Furthermore, myeloperoxidase levels in the liver and lung of AS101-treated mice, an indirect means of determining the recruitment of neutrophils, were significantly decreased. We suggest that nontoxic agents such as AS101, with the capacity to inhibit IL-10 and stimulate macrophage functions, may have clin. potential in the treatment of sepsis, provided they are administered during the phase of sepsis characterized by immune suppression.
CC 15-5 (Immunochemistry)

Section cross-reference(s): 1, 63
IT 106566-58-9, AS101
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-IL-10 therapy using immunomodulator AS101 in protecting mice from sepsis-induced death)
REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 4 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:10230 HCAPLUS Full-text
DOCUMENT NUMBER: 136:64100
TITLE: Combination HIV therapy including camptothecin
INVENTOR(S): Schochetman, Gerald; Chang, Lucy; Rubinfeld, Joseph
PATENT ASSIGNEE(S): Supergen, Inc., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002000168	A2	20020103	WO 2001-US19863	20010620 <--
WO 2002000168	A3	20030313		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001068653	A	20020108	AU 2001-68653	20010620 <--
EP 1311266	A2	20030521	EP 2001-946632	20010620 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20040116411	A1	20040617	US 2003-670179	20030923 <--
PRIORITY APPLN. INFO.:			US 2000-606967	A1 20000628 <--
			WO 2001-US19863	W 20010620 <--

AB A method is provided for treating HIV infection using a combination therapy which includes a compound selected from the group consisting of 20(S)-camptothecin, an analog of 20(S)-camptothecin, a derivative of 20(S)-camptothecin, a precursor of 20(S)-camptothecin and a metabolite of 20(S)-camptothecin, in combination with a cocktail of antiretroviral drugs such as nucleoside reverse transcriptase inhibitors, non-nucleoside HIV reverse transcriptase inhibitors, protease inhibitors, fusion inhibitors and integrase inhibitors. The method comprises administering highly active antiretroviral therapy (HAART); and co-administering to the HIV-infected host therapeutically effective amount of a compound selected from the group consisting of 20(S)-camptothecin, an analog of 20(S)-camptothecin, a derivative of 20(S)-camptothecin, a precursor of 20(S)-camptothecin, and a metabolite of 20(S)-camptothecin.
IC ICM A61K
CC 1-5 (Pharmacology)
IT 100-33-4, Pentamidine 107-36-8 3056-17-5, Stavudine 7481-89-2, Zalcitabine 7689-03-4, 20(S)-Camptothecin 7689-03-4D, 20(S)-Camptothecin, derivs. 8025-81-8, Spiramycin 9042-14-2, Dextran sulfate 30516-87-1, Zidovudine 36791-04-5, Virazole 39026-92-1,

9-Methoxycamptothecin 56741-95-8, Bropirimine 58569-55-4, Methionine enkephalin 59277-89-3, Acyclovir 63585-09-1, Trisodium phosphonoformate 69655-05-6, Didanosine 70052-12-9, Ornidyl 72559-06-9 72732-56-0, Piritrexim 78287-27-1 82410-32-0, Ganciclovir 83869-56-1, GM-CSF 84625-61-6, R51211 86386-73-4, Fluconazole 86639-52-3, 7-Ethyl-10-hydroxycamptothecin 86639-64-7, 10-Chlorocamptothecin 86639-65-8, 10-Bromocamptothecin 91421-42-0, 9-Nitro-20(S)-camptothecin 91421-43-1, 9-Amino-20(S)-camptothecin 91421-49-7, 9-Chlorocamptothecin 106362-32-7 106566-58-9, AS-101 110042-95-0, Acemannan 123949-23-5 124389-07-7, Muramyl tripeptide 127514-32-3 127779-20-8, Saquinavir 129618-40-2, Nevirapine 134678-17-4, Lamivudine 135415-73-5 136470-78-5, Abacavir 136817-59-9, Delavirdine 141732-89-0, Novapren 141733-18-8, SK&F 106528 142340-99-6, Adefovir dipivoxil 149809-18-7 150378-17-9, Indinavir 151585-79-4 151585-80-7 154598-52-4, Efavirenz 155213-67-5, Ritonavir 159519-65-0, DP178 159989-64-7, Nelfinavir 161814-49-9, Amprenavir 186036-91-9 186092-60-4 186673-22-3, DP107 194414-69-2, Camptothecin-20-O-propionate 194414-71-6, Camptothecin-20-O-butyrate 194414-73-8, Camptothecin-20-O-valerate 194414-75-0, Camptothecin-20-O-heptanoate 194414-76-1, Camptothecin-20-O-nonanoate 194414-78-3 194414-79-4 194414-80-7 194414-81-8 246220-45-1, Camptothecin-20-O-crotonate 251922-77-7, L-731988 251924-35-3, L-731927 251963-74-3, L-708906 384380-42-1, L 731942 384380-43-2, CL 246728
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(camptothecin combination for therapy of HIV infection)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 5 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:935627 HCAPLUS Full-text
DOCUMENT NUMBER: 136:48819
TITLE: Methods for treating and preventing alopecia using angiotensinogen, angiotensin I, angiotensin II, their analogs and fragments and AT2 receptor agonists
INVENTOR(S): Roders, Kathleen E.; Dizerega, Gere S.
PATENT ASSIGNEE(S): University of Southern California, USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001098325	A1	20011227	WO 2000-US32340	20001127 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001018024	A	20020102	AU 2001-18024	20001127 <--
EP 1292610	A1	20030319	EP 2000-980808	20001127 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

US 6747008 B1 20040608 US 2000-723255 20001127 <--
PRIORITY APPLN. INFO.: US 2000-212608P P 20000619 <--
WO 2000-US32340 W 20001127 <--
OTHER SOURCE(S): MARPAT 136:48819
AB The present invention provides improved methods, kits, and pharmaceutical compns. for treating and preventing alopecia in a subject in need thereof by administering an effective amount of angiotensinogen, angiotensin I (AI), AI analogs, AI fragments and analogs thereof, angiotensin II (AII), AII analogs, AII fragments or analogs thereof or AII AT2 type 2 receptor agonists to the subject. The method further comprises treating the subject with an effective amount of another compound for treating or preventing alopecia, selected from the group consisting of minoxidol, keratinocyte growth factor, fibroblast growth factor, epidermal growth factor, butyric acid and its derivs., ammonium trichloro(dioxyethylene-O,O') tellurate, interleukin 1, prostaglandin E2, cyclosporine A, corticosteroids and calcitriol.
IC ICM C07K007-14
ICS A61K038-06; A61K038-07; A61K038-08; A61P017-14
CC 2-10 (Mammalian Hormones)
IT 107-92-6, Butyric acid, biological studies 107-92-6D, Butyric acid, derivs. 363-24-6, Prostaglandin E2 32222-06-3, Calcitriol 59865-13-3, Cyclosporine A 62031-54-3, Fibroblast growth factor 62229-50-9, Epidermal growth factor 106566-58-9
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods for treating and preventing alopecia using angiotensinogen, angiotensin I, angiotensin II, analogs and fragments and AT2 receptor agonists in combination with other agents)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 6 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:820759 HCAPLUS Full-text
DOCUMENT NUMBER: 136:323744
TITLE: Cytokine profile of patients with mycosis fungoides and the immunomodulatory effect of AS101
AUTHOR(S): Shohat, M.; Hodak, E.; Sredni, B.; Shohat, B.; Sredni, D.; David, M.
CORPORATE SOURCE: Department of Dermatology, Rabin Medical Center, Petah Tiqva, 49100, Israel
SOURCE: Acta Dermato-Venereologica (2001), 81(4), 255-257
CODEN: ADVEA4; ISSN: 0001-5555
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cytokines are known to play a major role in the pathogenesis of mycosis fungoides, a cutaneous malignant neoplasm of CD4 T cells. Here, the authors investigated the effect of AS101, a tellurium-based compound with immunomodulating properties, on the pattern of lymphokine production by peripheral blood mononuclear cells (PBMCs) from patients with mycosis fungoides. PBMCs were isolated from 35 patients with mycosis fungoides stage IA and IB before initiation of treatment and from 20 healthy sex- and age-matched controls. Unstimulated and phytohemagglutinin-stimulated PBMCs were tested with and without the addition of AS101. The production of interferon-γ, interleukin 2 (IL-2), IL-2 receptor (IL-2R), IL-5, and IL-10 was determined by enzyme-linked immunosorbent assays. The effects of AS-101 on mycosis fungoides PBMCs were compared to those of healthy donor PBMCs. Higher levels of IL-2R, IL-5, and IL-10 and lower levels of interferon-γ were found in the patients compared to the controls. There was no difference between the groups in the production of IL-2. AS101 inhibited the production of IL-2R, IL-5, and

IL-10 and induced a significant increase in IL-2 levels in the mycosis fungoides PBMCs. These findings may have important clin. implications for the possible therapeutic benefit of AS101 in mycosis fungoides.

CC 15-5 (Immunochemistry)
Section cross-reference(s): 1, 14

IT 106566-58-9, AS101
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cytokine profile of patients with mycosis fungoides and immunomodulatory effect of AS101)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 7 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:264739 HCAPLUS Full-text
DOCUMENT NUMBER: 133:159722
TITLE: Synergistic anti-tumoral effect of paclitaxel (Taxol)+AS101 in a murine model of B16 melanoma: association with ras-dependent signal-transduction pathways
AUTHOR(S): Kalechman, Yona; Longo, Dan L.; Catane, Raphael; Shani, Adi; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: C.A.I.R. Institute, The Marilyn Finkler Cancer Research Center, Faculty of Life Sciences, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: International Journal of Cancer (2000), 86(2), 281-288
CODEN: IJCNAW; ISSN: 0020-7136
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Optimal doses of paclitaxel (Taxol) combined with the immunomodulator AS101, previously shown to have anti-tumoral effects, administered to B16 melanoma-bearing mice decreased tumor volume and resulted in over 60% cure. Paclitaxel+AS101 directly inhibited the clonogenicity of B16 melanoma cells in a synergistic, dose-dependent manner. We suggest that this results from both reduced paclitaxel-induced bone marrow toxicity and induction of differential signal-transduction pathways, which lead to apoptosis of tumor cells. Paclitaxel+AS101 synergistically activated c-raf-1 and MAPK ERK1 and ERK2. This activation was essential for the synergistic induction of p21waf protein. Cell-cycle anal. of B16 cells treated with both compds. revealed an increased accumulation in G2M, though AS101 alone produced significant G1 arrest. These activities were ras-dependent. AS101+paclitaxel induced significant synergistic phosphorylation (inactivation) of the anti-apoptotic protein Bcl-2. Whereas phosphorylation of Bcl-2 by paclitaxel was raf-dependent only, the synergistic effect of both compds. together was ras-, raf- and MAPK-dependent. No effect of the combined treatment on Bax protein expression was observed We suggest that AS101 renders more cells susceptible to Bcl-2 phosphorylation by paclitaxel, possibly by increasing the accumulation of paclitaxel-induced cells in G2M. Exposure of B16 cells to clin. achievable concns. of paclitaxel+AS101 increased the rate of apoptosis of treated cells. Apoptosis induced by AS101 alone was both raf- and MAPK-dependent, while that induced by paclitaxel was raf-dependent only.

CC 1-6 (Pharmacology)

IT 33069-62-4, Paclitaxel 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synergistic antitumoral effect of paclitaxel plus AS101 in a murine model of B16 melanoma and role of ras-dependent signal-transduction

pathways)
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 8 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:670327 HCAPLUS Full-text
DOCUMENT NUMBER: 131:257697
TITLE: Preparation of trichloro-(dioxyethylene-o,o')ammonium tellurate
INVENTOR(S): Sun, Rupin
PATENT ASSIGNEE(S): Shenyang Pharmacy University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1130185	A	19960904	CN 1995-111987	19950912 <--
PRIORITY APPLN. INFO.:			CN 1995-111987	19950912 <--

OTHER SOURCE(S): CASREACT 131:257697
AB The title compound is prepared by mixing tellurium oxide, 2M HCl, glycol, and NH4Cl, refluxing for 0.25-72 h, cooling, filtering, washing with alc., and drying. The molar ratio of tellurium oxide to HCl is, preferably, 1:5-6, and that of tellurium oxide to glycol is, preferably, 1 : 1. The optimum reaction temperature and time are 140-160°F and 6 h, resp.
IC ICM C07D329-00
CC 29-8 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 1, 15
IT 106566-58-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of trichloro(dioxyethylene)ammonium tellurate)

L84 ANSWER 9 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1999:443433 HCAPLUS Full-text
DOCUMENT NUMBER: 131:227518
TITLE: Up-regulation by ammonium trichloro(dioxoethylene-0,0') tellurate (AS101) of fas/apo-1 expression on B16 melanoma cells: implications for the antitumor effects of AS101. [Erratum to document cited in CA130:24022]
AUTHOR(S): Kalechman, Yona; Strassmann, Gideon; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: Cancer, AIDs, and Immunology Research Institute, Dep. Life Sciences, Bar Ilan Univ., Ramat Gan, 532900, Israel
SOURCE: Journal of Immunology (1999), 163(2), 1093
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The table appearing at the top left column of page 3537 does not belong to this article.
CC 15-8 (Immunochemistry)
Section cross-reference(s): 1
IT 106566-58-9, As101
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process);

USES (Uses)
(up-regulation by ammonium trichloro(dioxoethylene-O,O') tellurate (AS101) of Fas/Apo-1 expression on B16 melanoma cells: implications for antitumor effects of AS101 (Erratum))

L84 ANSWER 10 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:651663 HCAPLUS Full-text
DOCUMENT NUMBER: 130:24022
TITLE: Up-regulation by ammonium trichloro(dioxoethylene-O,O') tellurate (AS101) of Fas/Apo-1 expression on B16 melanoma cells: implications for the antitumor effects of AS101
AUTHOR(S): Kalechman, Yona; Strassmann, Gideon; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: Cancer, AIDs, and Immunology Research Institute, Dep. of Life Sciences, Bar Ilan University, Ramat Gan, 532900, Israel
SOURCE: Journal of Immunology (1998), 161(7), 3536-3542
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
AB It was recently reported that human and mouse melanoma cells express Fas ligand (FasL) but almost no Fas, which may contribute to their immune privilege. AS101 (ammonium trichloro(dioxoethylene-O,O')tellurate), a synthetic immunomodulator with minimal toxicity, was found to have antitumor effects in various tumor models. Our present study shows that AS101 has direct and indirect effects on tumor cells: AS101 inhibits the clonogenicity of B16 melanoma cells in vitro. Moreover, wild-type P53 expression, which is required for induction of Apo-1 expression, increased significantly in AS101-treated cells. We therefore investigated Fas expression in AS101-treated B16 cells and found that Fas, but not FasL, expression was significantly increased; moreover, Fas receptors were functional. Longer incubation with AS101 resulted in spontaneous apoptosis triggered by Fas-FasL system. To explore the relationship of these results to the antitumor effects of AS101, we injected B16-F10 mouse melanoma cells into syngeneic C57BL/6 mice carrying the lpr mutation in the Fas gene and to gld mutant mice that lack functional FasL. Tumor development in control groups was lowest in the lpr mice, while no difference was observed between gld and wild-type mice. Among the AS101-treated groups, the most pronounced effect appeared in the lpr mice, while the lowest was seen in the gld mutant mice. Our study suggests that AS101 may render melanoma tumor cells more sensitive to Fas/FasL-induced apoptosis and may therefore have clin. potential.
CC 15-8 (Immunochemistry)
Section cross-reference(s): 1
IT 106566-58-9, As101
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process);
USES (Uses)
(up-regulation by ammonium trichloro(dioxoethylene-O,O') tellurate (AS101) of Fas/Apo-1 expression on B16 melanoma cells: implications for antitumor effects of AS101)
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 11 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:355691 HCAPLUS Full-text
DOCUMENT NUMBER: 129:117453
ORIGINAL REFERENCE NO.: 129:23921a,23924a

TITLE: The immunomodulator AS101 restores TH1 type of response suppressed by Babesia rodhaini in BALB/c mice
AUTHOR(S): Rosenblatt-Bin, Hanna; Kalechman, Yona; Vonsover, Mi; Xu, Ren-He; Da, Ji-Ping; Shalit, Frances; Huberman, Moshe; Klein, Avraham; Strassmann, Gideon; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: CAIR Institute, Marilyn Finkler Cancer Research Center, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: Cellular Immunology (1998), 184(1), 12-25
CODEN: CLIMB8; ISSN: 0008-8749
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The immunomodulator AS101 has been previously shown to confer protection upon BALB/c mice infected with the intraerythrocytic parasite Babesia rodhaini (B. rodhaini). The present study focuses on the effect of AS101 administration on the acute phase of babesial infection where T helper cell subset patterns-TH1/TH2-were assessed in heavily infected mice. Secretion of cytokines of the TH1 subset (IL-2, IFN-γ, IL-12) and of the TH2 subset (IL-10, IL-4) as well as TGF-β was measured following the administration of AS101 2 wk before parasite infection. Our results demonstrate that the parasites suppress IL-2 protein and IL-12 mRNA and that AS101 upregulates their secretion: IL-2, 8 u/mL vs. 34 u/mL, resp.; IFN-γ protein, 2370 pg/mL vs. 4777 pg/mL, resp. Conversely, babesial infection results in the upregulation of IL-10 and IL-4 proteins and TGF-β transcripts, whereas AS101 downregulates their production: IL-10, 1800 pg/mL vs. 360 pg/mL, resp.; IL-4, 58.3 pg/mL vs. 24.5 pg/mL, resp. A possible escape mechanism induced by B. rodhaini is suggested, starting with IL-10 inhibition of macrophage activities leading to a suppression of the TH1 response and of IL-2 in particular. It is therefore possible that AS101 may protect infected mice by activating cellular-mediated immunity and concurrently balancing the TH subset responses. It is suggested that AS101 may be effective as an antiparasitic drug. (c) 1998 Academic Press.

CC 1-5 (Pharmacology)
Section cross-reference(s): 15
IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunomodulator AS101 restores TH1 type of response suppressed by Babesia rodhaini in BALB/c mice)
REFERENCE COUNT: 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 12 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:233063 HCAPLUS Full-text
DOCUMENT NUMBER: 128:317003
ORIGINAL REFERENCE NO.: 128:62653a,62656a
TITLE: Effects of bryostatin 1 and calcium ionophore (A23187) on apoptosis and differentiation in human myeloid leukemia cells (HL-60) following 1-β-D-arabinofuranosylcytosine exposure
AUTHOR(S): Vrana, Julie A.; Rao, Anjalis S.; Wang, Zhiliang; Jarvis, W. David; Grant, Steven
CORPORATE SOURCE: Department of Medicine, Medical College of Virginia, Richmond, VA, 23298, USA
SOURCE: International Journal of Oncology (1998), 12(4), 927-934
CODEN: IJONES; ISSN: 1019-6439
PUBLISHER: International Journal of Oncology

DOCUMENT TYPE: Journal
LANGUAGE: English
AB The goal of the present study was to determine whether partial restoration of the differentiation-inducing capacity of the PKC activator bryostatin 1 by the calcium ionophore A23187 is accompanied by enhancement of apoptosis in ara-C-pretreated human leukemia cells. When HL-60 cells were exposed to ara-C (10 or 100 μM; 6 h) followed by bryostatin 1 alone (10 nM; 24 h), no increase in apoptosis was noted. In contrast, subsequent exposure of ara-C-pretreated cells to A23187 (250 nM; 24 h) increased apoptosis by .apprx.100%. When ara-C-pretreated cells were incubated with A23187 and bryostatin 1, no further potentiation of cell death (compared to cells exposed to A23187 alone) was observed Nevertheless, the combination of bryostatin 1 and A23187 substantially increased inhibition of clonogenicity in cells preincubated with ara-C (e.g., by ≥2 logs). This effect was associated with morphol. and functional evidence (i.e., plastic adherence) of enhanced leukemic cell maturation. The differentiating capacity of the combination of bryostatin 1 and A23187 was significantly weaker than that of the phorbol diester, PMA (10 nM), and unaccompanied (at 24 h) by induction of the cyclin-dependent kinase inhibitors (CDKIs) p21WAFI/CIPI and p27KIP1. However, the extent of apoptosis was comparable in cells exposed to ara-C followed by PMA or bryostatin 1 + A23187, suggesting that differentiation per se is not solely responsible for enhancement of cell death in ara-C-pretreated cells. Coadministration of bryostatin 1 and the organotellurium compound AS101, which mimics the actions of A23187 in some systems, after ara-C also led to enhanced antiproliferative effects which were unaccompanied by an increase in apoptosis. Finally, exposure of cells to ara-C followed by other differentiation-inducing agents, including dimethylsulfoxide and sodium butyrate also resulted in increases in cell death in this cell line. These findings indicate that the inability of bryostatin 1 to potentiate apoptosis in ara-C-pretreated HL-60 cells may involve factors other than an inadequate differentiation stimulus. They also suggest that loss of leukemic self-renewal capacity following exposure to cytotoxic and differentiation-inducing agents may involve mechanisms other than, or in addition to, potentiation of apoptosis, particularly cellular maturation.
CC 1-6 (Pharmacology)
IT 67-68-5, Dimethylsulfoxide, biological studies 147-94-4, 1-β-D-Arabinofuranosylcytosine 156-54-7, Sodium butyrate 16561-29-8, Pma 52665-69-7, A23187 83314-01-6, Bryostatin 1 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bryostatin 1 and calcium ionophore A23187 effect on apoptosis and differentiation in ara-C-pretreated human myeloid leukemia)
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 13 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:229548 HCAPLUS Full-text
DOCUMENT NUMBER: 128:241081
ORIGINAL REFERENCE NO.: 128:47653a,47656a
TITLE: Tellurium Compounds: Selective Inhibition of Cysteine Proteases and Model Reaction with Thiols
AUTHOR(S): Albeck, Amnon; Weitman, Hana; Sredni, Benjamin; Albeck, Michael
CORPORATE SOURCE: Department of Chemistry, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: Inorganic Chemistry (1998), 37(8), 1704-1712
CODEN: INOCAJ; ISSN: 0020-1669

PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Ammonium trichloro(dioxoethylene-O,O')tellurate (AS101) is an organotellurium(IV) compound that exhibits immunomodulation activity. In light of the unique Te(IV)-thiol chemical, it was tested as a selective cysteine protease inhibitor. Although no inhibitory activity of serine-, metallo-, or aspartic proteases was observed, AS101 exhibited time- and concentration-dependent inactivation of cysteine proteases. The kinetic parameters of inactivation of papain were Ki = 3.5±2.0 μM and ki = (5.1±0.4) + 10-2 min-1. The enzymic activity could be recovered by treatment with thiols, indicating that the inactivation involves oxidation of the active-site thiol to a disulfide bond (Enz-S-S-R) or to a species containing a Te-S bond such as Enz-S-Te-S-R. Gel permeation chromatog. established that the R group is a small mol. and excludes the possibility of dimerization of the enzyme itself. It was further established that some other Te(IV) derivs. could also inactivate cysteine proteases, while Te(VI) derivs. did not exhibit any such inhibitory activity. In order to understand the chemical underlying the cysteine protease inactivation by AS101 and other organotellurium(IV) compds., their interaction with the model compound cysteine was studied. While the Te(VI) derivs. did not interact with cysteine, all of the Te(IV) compds. interacted with 4 equiv of cysteine. The kinetics of this interaction is first order in Te and second order in thiol, yielding a third-order rate constant of .apprx.106 M-2 s-1, as determined for the interaction between AS101 with cysteine. The interactions between Te derivs. and cysteine in DMSO were followed by 125Te and 13C NMR. While Te(VI) compds. did not undergo any changes upon interaction with cysteine, on the basis of their 125Te NMR, the Te(IV) derivs. interacted with 4 equiv of cysteine, yielding new stable Te(IV) compds. These compds. were tentatively designated as Te(cysteine)4 or its high-valence complex with other components in the reaction mixture These results expand our understanding of tellurium chemical and correlate well with its biol. activity. Such knowledge can be applied for the development of novel biol. active tellurium compds.
CC 7-3 (Enzymes)
IT 176-57-8 7446-07-3, Tellurium oxide (TeO2) 7803-68-1, Telluric acid (H6TeO6) 57251-96-4 106566-58-9, AS101 204931-54-4 204931-55-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(tellurium compds., selective inhibition of cysteine proteases and model reaction with thiols)
REFERENCE COUNT: 76 THERE ARE 76 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 14 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:78241 HCAPLUS Full-text
DOCUMENT NUMBER: 128:226180
ORIGINAL REFERENCE NO.: 128:44681a,44684a
TITLE: Antioxidative properties of organotellurium compounds in cell systems
AUTHOR(S): Wieslander, Elisabet; Engman, Lars; Svensjo, Erik; Erlansson, Magnus; Johansson, Ulf; Linden, Margareta; Andersson, Carl-Magnus; Brattsand, Ralph
CORPORATE SOURCE: PRECLINICAL R and D, ASTRA DRACO AB, LUND, S-221 00, Swed.
SOURCE: Biochemical Pharmacology (1998), 55(5), 573-584
CODEN: BCPCA6; ISSN: 0006-2952
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The protective/antioxidative properties of diaryl tellurides were demonstrated in cellular systems of increasing complexity. In the presence of glutathione, bis(4-hydroxyphenyl) telluride (I), bis(4-aminophenyl) telluride (II) and bis(2-carboxyphenyl) telluride reduced by more than 50% t-Bu hydroperoxide-induced cell death in lung fibroblast cultures at concns. below 2 μM. Bis(2,6-dimethyl-4-hydroxyphenyl) telluride (III) reduced by more than 50% leukocyte-mediated and phorbol-12-myristate-13-acetate-stimulated damage to Caco-2 cells at 0.1 μM concentration As judged by their abilities to reduce formation of thiobarbituric acid reactive substances at concns. close to 1 μM, diaryl tellurides I, II and III protected rat kidney tissue against oxidative damage caused by anoxia and reoxygenation. The organotellurium compds. also offered protection after systemic administration. In the presence of diaryl telluride III (0.1-1 μM), the ischemia/reperfusion-induced vascular permeability increase in the hamster cheek pouch was significantly reduced as compared with the control. Some of the most active organotellurium cell protectants were evaluated for their ability to inhibit formation of the inflammatory mediators leukotriene B4 and interleukin-1β. An inhibitory effect on the secretion of these species was seen for compds. I and III at or above 10 μM concns. The protective effects of diaryl tellurides against t-Bu hydroperoxide-induced cell injury can be ascribed mainly to the peroxide-decomposing, glutathione peroxidase-like capacity of the compds. The chain-breaking, electron- or hydrogen atom-donating ability of diaryl tellurides seems to be the main reason for their protection against leukocyte-mediated cell damage in Caco-2 cells and in the oxidatively challenged rat kidney and hamster cheek pouch.

CC 1-12 (Pharmacology)

IT 1202-36-4 4456-34-2 22541-49-7D, Telluride, aryl compds. 59130-74-4 63212-71-5 63212-74-8 67915-76-8 86436-75-1 86436-77-3 95458-32-5 106566-58-9, AS 101 124620-12-8 144381-99-7 144382-01-4 144382-05-8 144693-19-6 152943-38-9 152943-39-0 152943-40-3 152943-42-5 152943-49-2 155791-94-9 204519-52-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antioxidative and cytoprotective properties of organotellurium compds. in cell systems)

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 15 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:598362 HCAPLUS Full-text

DOCUMENT NUMBER: 127:291938

ORIGINAL REFERENCE NO.: 127:57041a,57044a

TITLE: Delay in the onset of systemic lupus erythematosus following treatment with the immunomodulator AS101. Association with IL-10 inhibition and increase in TNF-α levels

AUTHOR(S): Kalechman, Yona; Gafter, Uzi; Da, Ji Ping; Albeck, Michael; Alarcon-Segovia, Donato; Sredni, Benjamin

CORPORATE SOURCE: Dep. of Life Sci., Cancer, AIDS, and Immunol. Res. Inst., Bar Ilan Univ., Ramat Gan, Israel

SOURCE: Journal of Immunology (1997), 159(6), 2658-2667
CODEN: JOIMA3; ISSN: 0022-1767

PUBLISHER: American Association of Immunologists

DOCUMENT TYPE: Journal

LANGUAGE: English

AB It has recently been found that in systemic lupus erythematosus (SLE), a multisystem inflammatory disorder characterized by autoantibody production and

decreased cellular immune response, increased spontaneous production of IL-10 occurs. The immunomodulator AS101 (ammonium trichloro(dioxoethylene-0,0')tellurate) was previously shown to significantly decrease IL-10 levels in cancer patients and in murine models. This study shows that AS101 inhibits the development of SLE-related autoimmune pathol. manifestations. AS101 decreased the spontaneous IL-10 production by mononuclear cells from SLE patients in vitro. In vivo, systemic injection of AS101 to SCID mice transplanted with mononuclear cells from SLE patients significantly decreased serum human IL-10 levels. There was also a decrease in all serum human Ig isotypes, in anti-dsDNA, and in anti-Sm Igs. In the New Zealand Black/New Zealand White/F1 model, AS101 significantly increased serum TNF-α and IFN-γ while decreasing IL-10 levels; these changes were accompanied by a rapid decrease in anti-dsDNA and anti-ssDNA Igs. More importantly, continuous treatment of New Zealand Black/New Zealand White/F1 mice with AS101 for 6 mo led to the development of proteinuria in 30% of the treatment mice compared with 100% in PBS-treated mice. AS101 treatment reduced the level of immune complex deposition in the glomeruli, prevented glomerular hypercellularity and mesangial expansion and led to a much smaller mean glomerular volume in treated mice (185 ± 6 vs 428 ± 47.103 μm3). We suggest that treatment with a nontoxic immunomodulator such as AS101, previously used in phase II trials on cancer patients, may be an effective therapeutic approach for controlling SLE.

CC 15-8 (Immunochemistry)
Section cross-reference(s): 1

IT 106566-58-9, As101
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(AS101 delays onset of systemic lupus erythematosus and effects on interleukin 10 and tumor necrosis factor α)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 16 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:204399 HCAPLUS Full-text
DOCUMENT NUMBER: 126:207502
ORIGINAL REFERENCE NO.: 126:39993a,39996a
TITLE: Method of treating babesiosis with tellurium compounds
INVENTOR(S): Sredni, Benjamin; Albeck, Michael
PATENT ASSIGNEE(S): Israel
SOURCE: U.S., 16 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5610179	A	19970311	US 1994-357129	19941215 <--

PRIORITY APPLN. INFO.: US 1994-357129 19941215 <--
OTHER SOURCE(S): MARPAT 126:207502

AB A method of treating or preventing babesiosis is described which is based on the administration of a tellurium compound The preferred tellurium compound is ammonium trichloro(O,O'-dioxoethylene tellurate).

IC ICM A61K031-335
ICS A61K031-35; A61K031-34; A61K033-24

INCL 514450000

CC 1-5 (Pharmacology)

IT 7446-07-3, Tellurium dioxide 7446-07-3D, Tellurium dioxide, complexes 13494-80-9D, Tellurium, compds., biological studies 29510-67-6 106566-58-9

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tellurium compds. for treatment of babesiosis)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 17 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:199064 HCAPLUS Full-text
DOCUMENT NUMBER: 126:276137
ORIGINAL REFERENCE NO.: 126:53521a,53524a
TITLE: The immunomodulator AS-101 inhibits IL-10 release and augments TNFα and IL-1α release by mouse and human mononuclear phagocytes
AUTHOR(S): Strassmann, Gideon; Kambayashi, Taku; Jacob, Chaim O.; Sredni, Devora
CORPORATE SOURCE: Dep. Immunology, Otsuka-America Pharmaceutical Inc., Rockville, MD, 20850, USA
SOURCE: Cellular Immunology (1997), 176(2), 180-185
CODEN: CLIMB8; ISSN: 0008-8749
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English
AB AS-101 is a tellurium-based compound with known immunomodulating properties. The ability of AS-101 to potentiate the effects of chemotherapeutic drugs and augment cytokine production in vivo has led to clin. trials on AS-101 which are currently being carried out in cancer patients. In the present study we show that AS-101 selectively augments the release of TNFα and IL-1α and inhibits the release of IL-10 by lipopolysaccharide (LPS)-stimulated mouse peritoneal macrophages and human monocytes. It does not significantly affect the release of IL-6 or leukemia inhibitory factor (LIF). By itself AS-101 does not induce the release of any of these cytokines. Anal. of IL-10 and TNFα RNA levels using semiquant. PCR reveals that AS-101 blocks the transcription of IL-10 mRNA, but does not significantly affect TNFα mRNA. Although both AS-101 and interferon (IFN))-γ inhibit IL-10, AS-101, unlike IFN-γ, does not prime macrophages for LPS-induced nitric oxide release and does not appear to significantly affect monocyte HLA-DR expression. Our data suggest that AS-101 is a partial IFN-γ agonist and may explain the shift toward the release of Th-1 type cytokines observed in AS-101-treated patients.
CC 15-5 (Immunochemistry)
Section cross-reference(s): 1
IT 106566-58-9, As-101
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(immunomodulator AS-101 inhibits IL-10 release and augments TNFα and IL-1α release by mouse and human mononuclear phagocytes)

L84 ANSWER 18 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:719025 HCAPLUS Full-text
DOCUMENT NUMBER: 126:54877
ORIGINAL REFERENCE NO.: 126:10687a,10690a
TITLE: Tellurium compounds for treating gastric ulcers
INVENTOR(S): Sredni, Benjamin; Albeck, Michael
PATENT ASSIGNEE(S): Israel
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5576347	A	19961119	US 1994-339334	19941114 <--
PRIORITY APPLN. INFO.:			US 1994-339334	19941114 <--

AB The invention is based on the use of a tellurium compound to treat or prevent gastritis or peptic ulcer. The tellurium compds. may be administered orally or parenterally to a host who is afflicted with or is susceptible to these conditions. Ammonium trichloro (O,O'-dioxoethylene tellurate), given i.p. 2 h before an intragastric dose of 0.6N HCl, markedly prevented HCl-induced gastric lesions both in rats and mice.

IC ICM A61K031-35
ICS A61K031-335; A61K031-095

INCL 514467000

CC 1-9 (Pharmacology)

IT 7446-07-3, Tellurium dioxide 29510-67-6, Phenyltellurium trichloride 106566-58-9, AS 101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tellurium compds. for treating gastric ulcers)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 19 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:611276 HCAPLUS Full-text
DOCUMENT NUMBER: 125:265377
ORIGINAL REFERENCE NO.: 125:49241a,49244a
TITLE: Predominance of TH1 response in tumor-bearing mice and cancer patients treated with AS101
AUTHOR(S): Sredni, Benjamin; Tichler, Thomas; Shani, Adi; Catane, Rafael; Kaufman, Bella; Strassmann, Gideon; Albeck, Michael; Kalechman, Yona
CORPORATE SOURCE: Cancer, AIDS, and Immunology Research Institute, Bar-Ilan University, Ramat-Gan, 52900, USA
SOURCE: Journal of the National Cancer Institute (1996), 88(18), 1276-1284
CODEN: JNCIEQ; ISSN: 0027-8874
PUBLISHER: National Cancer Institute
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Several studies have recently suggested that the immune response to malignant growths is regulated by distinct patterns of type 2 cytokine production These cytokines, regulating the cytotoxic T-lymphocyte response in patients with advanced cancers, may be associated with disease progression. Evidence suggests that the T Helper 1 (TH1) and T Helper 2 (TH2) types of reaction are reciprocally regulated in vivo. The immunomodulator AS101 (ammonium trichloro[dioxoethylene-O,O']tellurate) was found to stimulate mouse and human cells to proliferate and secrete a variety of cytokines. Clin. trials using AS101 on cancer patients are now in progress. The aim of this study was to evaluate the ability of AS101 to modulate TH1 and TH2 responses in tumor-bearing mice and in patients with advanced cancer. In addition, the authors investigated the association between the predominance of each type of response with the antitumoral effects of AS101. Mice into which Lewis lung carcinoma (3LL) had been transplanted and cancer patients were treated with AS101 on alternate days, at 10 μg/mouse i.p., or for the patients, at 3 mg/m2 i.v. The types were sarcoma, melanoma, and colon, lung, ovarian, and renal cancers. Cytokine levels were determined by immunoassay kits and compared with the paired Student's t test: in mice, they were tested in spleen cell supernatants; in humans, in sera and mononuclear cell supernatants. The chi-

squared test was used to compare tumor vols. All P values represent two-sided tests of statistical significance. The authors' results show that treatment of mice and patients with AS101 results in a clear predominance in TH1 responses, with a concomitant decrease in the TH2-type response. This was reflected by a significant enhancement in interleukin 2 (IL-2) and interferon gamma (IFN γ) levels paralleled by a substantial decrease in IL-4 and IL-10. Moreover, the concentration of IL-12 was significantly increased in AS101-treated patients who also showed enhanced levels of natural and lymphokine-activated killer cell-mediated cytotoxicity. The statistically significant increases in IL-2 and IFN γ levels, paralleled by the pronounced decrease in IL-4 and IL-10 in the AS101-treated mice, were associated with its antitumoral effects. In addition, systemic cotreatment of 3LL-transplanted mice with AS101 and anti-IL-12 antibodies partly abrogated the antitumoral effect of AS101. Thus, immunotherapy with AS101 enhances TH1 function while interfering with the TH2 response. This TH1 trend may be related to the antitumor effects of AS101. Apparently, isolation and characterization of a distinct cytokine pattern in patients with advanced cancer treated with AS101 may contribute to the development of intervention strategies using this compound

CC 1-7 (Pharmacology)

IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(predominance of helper T lymphocyte 1 and 2 response in tumor-bearing mice and human cancer patients treated with AS101 in relation to cytokine levels and antitumor activity)

L84 ANSWER 20 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:509391 HCAPLUS Full-text
DOCUMENT NUMBER: 125:132741
ORIGINAL REFERENCE NO.: 125:24597a,24600a
TITLE: Method and composition for reducing tumor development with a combination of platinum and tellurium or selenium compounds
INVENTOR(S): Sredni, Benjamin; Albect, Michael
PATENT ASSIGNEE(S): Baker Norton Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9618392	A1	19960620	WO 1995-US15998	19951212 <--
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5654328	A	19970805	US 1994-357127	19941215 <--
CA 2206566	A1	19960620	CA 1995-2206566	19951212 <--
CA 2206566	C	20050816		
AU 9645970	A	19960703	AU 1996-45970	19951212 <--
AU 706696	B2	19990624		
EP 793493	A1	19970910	EP 1995-944080	19951212 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				

JP 4201346 B2 20081224 JP 1996-519175 19951212 <--
PRIORITY APPLN. INFO.: US 1994-357127 A 19941215 <--
WO 1995-US15998 W 19951212 <--
OTHER SOURCE(S): MARPAT 125:132741
AB Methods and compns. are provided for treating malignancies which comprise effective amts. of a combined therapy comprising a platinum compound (e.g. cisplatin) and a tellurium or selenium compound [e.g. ammonium trichloro(dioxoethylene-O,O-tellurate)], and administering the resp. compds. simultaneously or sep. The combinations of the invention have a synergistic effect.
IC ICM A61K031-40
ICS A61K031-335; A61K031-35; A61K031-34; A61K033-24; A61K033-04
CC 1-6 (Pharmacology)
Section cross-reference(s): 63
IT 15663-27-1, Cisplatin 106566-58-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(platinum compd.combination with tellurium compound or selenium compound for tumor treatment)
IT 7440-06-4D, Platinum, compds. 7446-07-3, Tellurium oxide 7782-49-2D, Selenium, compds. 13494-80-9D, Tellurium, compds. 29510-67-6 41575-94-4, Carboplatin 77593-50-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(platinum compd.combination with tellurium compound or selenium compound for tumor treatment)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 21 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:509388 HCAPLUS Full-text
DOCUMENT NUMBER: 125:132740
ORIGINAL REFERENCE NO.: 125:24597a,24600a
TITLE: Method and composition for reducing tumor development with a combination of a taxane compound and a tellurium and/or selenium compound
INVENTOR(S): Sredni, Benjamin; Bruckner, Howard B.; Albeck, Michael; Whisnant, John; Mettinger, Karl L.
PATENT ASSIGNEE(S): Baker Norton Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9618401	A1	19960620	WO 1995-US16097	19951212 <--
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2206567	A1	19960620	CA 1995-2206567	19951212 <--
CA 2206567	C	20060905		
AU 9643778	A	19960703	AU 1996-43778	19951212 <--
AU 699442	B2	19981203		

EP 793499 A1 19970910 EP 1995-942611 19951212 <--
EP 793499 B1 20051019
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 10510812 T 19981020 JP 1995-519214 19951212 <--
AT 306927 T 20051115 AT 1995-942611 19951212 <--
PRIORITY APPLN. INFO.: US 1994-357128 A 19941215 <--
WO 1995-US16097 W 19951212 <--
OTHER SOURCE(S): MARPAT 125:132740
AB Methods and compns. are provided for treating malignancies which comprise effective amts. of a combined therapy comprising a taxane compound(e.g., paclitaxel) and a tellurium or selenium compound [e.g. ammonium trichloro(dioxoethylene-O,O-tellurate)] and administering the resp. compds. simultaneously or sep. The combinations of the invention have a synergistic effect.
IC ICM A61K031-555
ICS A61K031-335
CC 1-6 (Pharmacology)
Section cross-reference(s): 63
IT 33069-62-4, Paclitaxel 106566-58-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(taxane compound combination with tellurium compound and/or selenium compound
for tumor treatment)
IT 7446-07-3, Tellurium oxide 7782-49-2D, Selenium, compds. 13494-80-9D, Tellurium, compds. 29510-67-6 77593-50-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(taxane compound combination with tellurium compound and/or selenium compound
for tumor treatment)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 22 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:502056 HCAPLUS Full-text
DOCUMENT NUMBER: 125:185115
ORIGINAL REFERENCE NO.: 125:34355a,34358a
TITLE: Inhibition of B16 melanoma metastasis by the immunomodulator AS101
AUTHOR(S): Xu, Ren-He; Kalechman, Yona; Albeck, Michael; Kung, Hsiang-Fu; Sredni, Benjamin
CORPORATE SOURCE: Frederick Cancer Research and Development Center, National Cancer Institute, Frederick, MD, 21702-1201, USA
SOURCE: International Journal of Oncology (1996), 9(2), 319-325
CODEN: IJONES; ISSN: 1019-6439
PUBLISHER: International Journal of Oncology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The immunomodulator ammonium trichloro(dioxyethylene-O-O')tellurate (AS101) has previously been found to induce secretion of various cytokines in mouse and human, which include interleukin-1, interleukin-2, colony-stimulating factor, interferon-γ, tumor necrosis factor, etc. It also protects mice from lethal and sublethal effects of chemotherapy and irradiation The present studies were designed to evaluate its effect on pulmonary metastasis following i.v. injection of mouse B16 melanoma cells on day 0 of the experiment AS101, given 10 μg/mouse i.p. in 7 daily injections starting the day before B16 cell infusion (day -1) led to a significant inhibition by 60%. When B16 cells were

pretreated with AS101 for 24 h before injection, the lung metastases were further reduced by subsequent AS101 treatment of the tumor-loaded mice. In mice that had been depleted of natural killer (NK) cells using anti-asialo-GM1 antisera, AS101 was deprived of its stimulatory effect on the NK activity. The inhibition by AS101 on the B16 lung metastasis was also profoundly reduced by the antisera. Moreover, in vitro treatment of B16 cells with AS101 resulted in suppression of the cell growth in a semisolid culture. This was accompanied by an inhibition of the DNA synthesis and a dephosphorylation/activation of the retinoblastoma susceptibility protein (RB), a tumor suppressor gene product, in the B16 cells. Taken together, these data suggest that AS101 possesses an anti-metastatic activity, which probably involves two mechanisms: the stimulation of the host NK cell activity and the inhibition of the tumor cell proliferation.

CC 1-6 (Pharmacology)

IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of B16 melanoma metastasis to lung by the immunomodulator AS101 and role of natural killer cells)

L84 ANSWER 23 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:453417 HCAPLUS Full-text
DOCUMENT NUMBER: 125:132073
ORIGINAL REFERENCE NO.: 125:24433a,24436a
TITLE: Antibabesial effect of the immunomodulator AS101 in mice: Role of increased production of nitric oxide
AUTHOR(S): Rosenblatt-Bin, H.; Klein, A.; Sredni, B.
CORPORATE SOURCE: CAIR Institute, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: Parasite Immunology (1996), 18(6), 297-306
CODEN: PAIMD8; ISSN: 0141-9838
PUBLISHER: Blackwell
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The immunomodulator AS101 has been shown to induce cell proliferation and to increase the secretion of a variety of cytokines. In the present study we evaluated the effect of AS101 on the pathogenicity of B. rodhaini infected mice. To clarify its mechanism of action we studied the ability of AS101 to activate neutrophils and macrophages, both of which inhibit parasite growth. More specifically, we studied the ability of AS101 to induce secretion of nitric oxide (NO). We found that AS101 protects mice from babesiosis in a time and dose dependent manner. At 10 and 20 μg/injection, two weeks prior to parasites, AS101 significantly increased the number of neutrophils and more than doubled the survival rate of infected mice. Similarly, at these concns. when injected one month, or at 20 μg, injected 24 h before parasites, AS101 mitigated the course of infection and reduced by half the peak of parasitemia. At 0.1 μg/mL, AS101 induced the secretion of significantly higher levels of NO in vitro than control. This was abrogated by adding the NO synthase inhibitor, NG-monomethyl-L-arginine. In vivo the antiparasitic protection of AS101 was abrogated by another NO synthase inhibitor, aminoguanidine. We found that AS101, partly by elevating levels of NO, can significantly mitigate the course of infection and thus increase survival, and may therefore be proven as an effective antiparasitic drug.

CC 1-7 (Pharmacology)

IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(AS101 inhibits Babesia rodhaini infection through activation of neutrophils and macrophages and increased nitric oxide production in mice)

L84 ANSWER 24 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:408445 HCAPLUS Full-text
DOCUMENT NUMBER: 125:75730
ORIGINAL REFERENCE NO.: 125:14143a,14146a
TITLE: Differential effect of the immunomodulator AS101 and B7-1 and B7-2 costimulatory molecules. Role in the antitumoral effects of AS101
AUTHOR(S): Kalechman, Yona; Sredni, Benjamin
CORPORATE SOURCE: Department of Life Sciences, Bar Ilan Univ., Ramat Gan, Israel
SOURCE: Journal of Immunology (1996), 157(2), 589-597
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The CD28 receptor on T cells with its ligand B7, representing the best characterized example of costimulation, has recently been demonstrated to interact with two different ligands: B7-1 and B7-2. AS101 (ammonium trichloro[dioxoethylene-O,O']tellurate), a synthetic immunomodulator with minimal toxicity, was previously shown to stimulate both mouse and human cells to proliferate and secrete a variety of cytokines. The authors recently found that treatment of advanced cancer patients or tumor-bearing mice was AS101 results in a clear predominance of Th1 responses with a concomitant decrease in Th2 response. The present study demonstrates that AS101 differentially affects B7-1 and B7-2 mol. expression on mouse macrophages: it up-regulates B7-1 expression in a dose-dependent manner without affecting B7-2 expression, which leads to a profound macrophage costimulatory activity of purified T cells with soluble anti-CD3. The results also demonstrate the differential inhibitory effect of IL-10 on T cell activation in the presence of AS101-stimulated accessory cells (AC). When stimulated with AS101, AC-dependent T cell activation was more resistant to inhibition by IL-10 compared with AC stimulated by LPS. This was due to the partial resistance of AS101-stimulated macrophages to the down-regulation of B7-1 expression by IL-10. In vivo studies with AS101-treated tumor-bearing mice revealed that the predominance in Th1 responses (marked by an increase in IFN-γ and a decrease in IL-4) may be associated in part with the ability of AS101 to up-regulate B7-1 expression, which is also related to its antitumoral effects. Thus, AS101 may be clin. effective in conditions involving dysfunctional cytokine production
CC 1-7 (Pharmacology)
Section cross-reference(s): 15
IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(differential effect of immunomodulator AS101 on B7-1 and B7-2 costimulatory mols. in relation to its antitumor effects)

L84 ANSWER 25 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:107387 HCAPLUS Full-text
DOCUMENT NUMBER: 124:193740
ORIGINAL REFERENCE NO.: 124:35539a,35542a
TITLE: The protective role of the immunomodulator AS101 against chemotherapy-induced alopecia studies on human and animal models
AUTHOR(S): Sredni, Benjamin; Xu, Ren-He; Albeck, Michael; Gafter, Uzi; Gal, Rivka; Shani, Adi; Tichler, Thomas; Shapira,

Jeremy; Bruderman, Israel; et al.
CORPORATE SOURCE: C.A.I.R. Institute, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: International Journal of Cancer (1996), 65(1), 97-103
CODEN: IJCNAW; ISSN: 0020-7136
PUBLISHER: Wiley-Liss
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The immunomodulator AS101 has been demonstrated to exhibit radioprotective and chemoprotective effects in mice. Following phase-I studies, preliminary results from phase-II clin. trials on non-small-cell-lung-cancer patients showed a reduction in the severity of alopecia in patients treated with AS101 in combination with chemotherapy. To further substantiate these findings, the present study was extended to include 58 patients treated either with the optimal dose of 3 mg/m2 AS101 combined with carboplatin and VP-16, or with chemotherapy alone. As compared with patients treated with chemotherapy alone, there was a significant decrease in the level of alopecia in patients receiving the combined therapy. The newly developed rat model was used to elucidate the protective mechanism involved in this effect. We show that significant prevention of chemotherapy-induced alopecia is obtained in rats treated with Ara-C combined with AS101, administered i.p. or s.c. or applied topically to the dorsal skin. We show that this protection by AS101 is mediated by macrophage-derived factors induced by AS101. Protection by AS101 can be ascribed, at least in part, to IL-I, since treatment of rats with IL-IRA largely abrogated the protective effect of AS101. Moreover, we demonstrate that in humans there is an inverse correlation between the grade of alopecia and the increase in IL-Iα. In addition, protection by AS101 could be related to PGE2 secretion, since injection of indomethacin before treatment with AS101 and Ara-C partly abrogated the protective effect of AS101. To assess the ability of AS101 to protect against chemotherapy-induced alopecia, phase-II clin. trials have been initiated with cancer patients suffering from various malignancies.
CC 1-7 (Pharmacology)
IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protective effect of immunomodulator AS101 against chemotherapy-induced alopecia in human and laboratory animals)

L84 ANSWER 26 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:64282 HCAPLUS Full-text
DOCUMENT NUMBER: 124:164669
ORIGINAL REFERENCE NO.: 124:30231a,30234a
TITLE: Effect of the immunomodulator AS101 on chemotherapy-induced multilineage myelosuppression, thrombocytopenia, and anemia in mice
AUTHOR(S): Kalechman, Y.; Rushkin, G.; Neurbay, J.; Albeck, M.; Sredni, B.
CORPORATE SOURCE: C.A.I.R. Inst., Bar Ilan Univ., Ramat Gan, Israel
SOURCE: Experimental Hematology (Charlottesville, Virginia) (1995), 23(13), 1358-66
CODEN: EXHMA6; ISSN: 0301-472X
PUBLISHER: Kluge Carden Jennings Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The immunomodulator AS101 has previously been found to induce mouse and human hematopoietic cells to secrete cytokines such as interleukin-1α (IL-1α), IL-2,

tumor necrosis factor-α (TNF-α), and γ interferon (IFN-γ). The compound was shown to protect mice from lethal and sublethal effects of chemotherapy and irradiation AS101 prevented the decrease in the number of bone marrow (BM) and spleen myeloid progenitor cells, and increased the survival of lethally treated mice. In this study, we show a dose-dependent response of AS101 in the induction of high secretion levels of IL-6, Il-3, granulocyte-macrophage colony-stimulating factor (GM-CSF), and stem cell factor (SCF). Since these growth factors are known to induce the proliferation and differentiation of multilineage progenitors, including megakaryocytic and erythroid progenitors, we designed this study to evaluate the role of AS101 in attenuating thrombocytopenia, anemia, and multilineage myelosuppression associated with chemotherapy. We demonstrate that pretreatment of mice with AS101 24 h before i.p. injection of 250 mg/kg cyclophosphamide (CYP) or i.v. injection of 150 mg/kg 5-fluorouracil (5-FU) significantly increased the number of circulating white blood cells (WBC) and platelets. The nos. of both neutrophils and lymphocytes were significantly increased in AS101-treated mice subjected to chemotherapy. In addition, AS101 attenuated erythropenia caused by 5-FU. It could also increase megakaryocyte and erythroid progenitor cells (CFU-MK and CFU-E) in the BM of treated mice severely affected by chemotherapy. We demonstrate that the protective effect of AS101 could be abrogated by treatment with anti-IL-IR or anti-SCF antibodies. We suggest that the endogenous production of cytokines such as IL-1, IL-6, IL-3, SCF, and GM-CSF in mice treated with AS101 offers production to circulating blood elements and ameliorates the reconstitution of megakaryocytic and erythroid progenitors. The simultaneous protection by AS101 of multilineage cell compartments is probably due to stimulation by AS101 of a selective subpopulation of primitive stem cells resistant to chemotherapy. On the basis of these studies, phase II clin. trials with patients treated with chemotherapy in combination with AS101 have been initiated.

CC 1-7 (Pharmacology)

IT 106566-58-9, Ossirene
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of the immunomodulator AS101 on chemotherapy-induced multilineage myelosuppression, thrombocytopenia, and anemia in mice)

L84 ANSWER 27 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:63793 HCAPLUS Full-text
DOCUMENT NUMBER: 124:135032
ORIGINAL REFERENCE NO.: 124:24803a,24806a
TITLE: The antitumoral effect of the immunomodulator AS101 and paclitaxel (Taxol) in a murine model of lung adenocarcinoma
AUTHOR(S): Kalechman, Yona; Shani, Adi; Dovrat, Sara; Whisnant, John K.; Mettinger, Karl; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: C.A.I.R. Inst., Bar Ilan Univ., Ramat Gan, Israel
SOURCE: Journal of Immunology (1996), 156(3), 1101-9
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The immunomodulator ammonium trichloro(dioxyethylene-0-0')tellurate (As101) has been shown to possess antitumoral properties in several murine models. In the present study, the authors demonstrate a synergistic in vivo antitumor effect of AS101 and Taxol against early stage Madison 109 lung adenocarcinoma. Treatment with optimal doses of Taxol (25 and 17 mg/kg) and AS101 (0.5 mg/kg) resulted in 66.6 and 43.3% cures. The authors propose that the antitumor effect is the result of both a direct and indirect effect of the drugs on

tumor cells. AS101 and Taxol directly inhibited clonogenicity of M109 cells in a synergistic dose-dependent manner. Exposure of M109 cells to clin. achievable concns. of Taxol and AS101 produced a synergistic internucleosomal DNA fragmentation associated with programmed cell death. The authors suggest that AS101 renders tumor cells more susceptible to chemotherapy in general and to Taxol in particular, partly by increasing the wild-type p53 protein expression that is required for efficient execution of the death program. Moreover, the authors demonstrate a synergistic effect of AS101 and Taxol in increasing the tumoricidal activity of macrophages. This activity is produced by nitric oxide secretion. The synergistic antitumoral effects of AS102 and Taxol were partly ablated both in vitro and in vivo by inhibition of nitric oxide secretion. The synergistic antitumoral effects of AS101 and Taxol were partly ablated both in vitro and in vivo by inhibition of nitric oxide synthase. These findings indicate that AS101 in combination with Taxol may be a promising antitumor drug, and illustrate the mechanism of action of both drugs when acting synergistically. Phase II clin. trials have been initiated using AS101 in combination with Taxol.

CC 1-6 (Pharmacology)

IT 33069-62-4, Paclitaxel 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(the antitumoral effect of the immunomodulator AS101 and paclitaxel (Taxol) in a murine model of lung adenocarcinoma)

L84 ANSWER 28 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:872975 HCAPLUS Full-text
DOCUMENT NUMBER: 124:331
ORIGINAL REFERENCE NO.: 124:63a,66a
TITLE: Bone marrow-sparing and prevention of alopecia by AS101 in non-small-cell lung cancer patients treated with carboplatin and etoposide
AUTHOR(S): Sredni, Benjamin; Albeck, Michael; Tichler, Thomas; Shani, Adi; Shapira, Jeremy; Bruderman, Israel; Catane, Rafael; Kaufman, Bella; Kalechman, Yona
CORPORATE SOURCE: Cancer, AIDS and Immunology Research Institute, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: Journal of Clinical Oncology (1995), 13(9), 2342-53
CODEN: JCONDN; ISSN: 0732-183X
PUBLISHER: Saunders
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The aim of this study was to evaluate the ability of the immunomodulator AS101 to prevent chemotherapy-induced neutropenia and thrombocytopenia and thus allow patients to receive full-dose antineoplastic agents according to protocol design. We also aimed to determine the production level of various hematopoietic growth factors in treated patients. This study of 44 unresectable or metastatic non-small-cell lung cancer (NSCLC) patients was an open-label prospective randomized study of standard chemotherapy alone vs. chemotherapy plus AS101. Each patient received carboplatin (300 mg/m2 i.v. [IV]) on day 1 of a 28-day cycle, and etoposide (VP-16) (200 mg/m2 orally) on days 3, 5, and 7 of each cycle. AS101 was administered at 3 mg/m2 three times per wk starting 2 wk before chemotherapy. AS101, which manifested no major toxicity, significantly reduced neutropenia and thrombocytopenia and thus allowed all treated patients to receive full-dose antineoplastic agents, in contrast to only 28.5% of the control group. Continuous treatment with AS101 significantly reduced the number of days per patient of thrombocytopenia and neutropenia and did not provide protection to tumor cells as reflected by the higher overall response rate compared with the chemotherapy-alone arm.

Interestingly, AS101 treatment also significantly prevented chemotherapy-induced alopecia. These effects correlate with the ability of AS101-treated patients to increase significantly the production of colony-stimulating factors (CSFs) interleukin-1 alpha (IL-1α) and IL-6. AS101 has significant bone marrow (BM)-sparing effects and prevents hair loss in chemotherapy-treated patients, with minimal overall toxicity. These effects are probably due to increased production of IL-1α, IL-6, and granulocyte-macrophage (GM)-CSF.

CC 1-6 (Pharmacology)

IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bone marrow-sparing and prevention of alopecia by AS101 in human non-small-cell lung cancer patients treated with carboplatin and etoposide)

L84 ANSWER 29 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:481242 HCAPLUS Full-text
DOCUMENT NUMBER: 122:255162
ORIGINAL REFERENCE NO.: 122:46256h,46257a
TITLE: AS-101 [ammonium trichloro(dioxoethylene-O,O'-)tellurate] a new immunomodulator for use in treatment of malignancies and AIDS
AUTHOR(S): Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: Chemistry Department, Bar-Ilan University, Ramat Gan, 52900, Israel
SOURCE: Trends Med. Chem. '90, Proc. Int. Symp. Med. Chem., 11th (1992), 329-32. Editor(s): Sarel, Shalom; Mechoulam, Raphael; Agranat, Israel. Blackwell: Oxford, UK.
CODEN: 60TTAQ
DOCUMENT TYPE: Conference; General Review
LANGUAGE: English
AB A review with 11 refs. AS101 and several of its derivs. such as bisdioxoethylene-O,O'-tellurium (AS102) and dichloro (dioxoethylene-O,O'-)tellurium (AS103) are a new series of organo-tellurium compds. of immunomodulating expression developed by the authors. AS101 and several of its derivs. induce the expression of IL-2 receptors, the production of IL-2, CSF, IL-3, TNF and IFNs, both in vitro and in vivo.

CC 1-0 (Pharmacology)

IT 106566-58-9, AS-101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ammonium trichloro(dioxoethylenetellurate as immunomodulator for treatment of malignancies and AIDS)

L84 ANSWER 30 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:437380 HCAPLUS Full-text
DOCUMENT NUMBER: 122:208770
ORIGINAL REFERENCE NO.: 122:38021a,38024a
TITLE: Role of endogenous cytokines secretion in radioprotection conferred by the immunomodulator ammonium trichloro(dioxyethylene-O-O')tellurate
AUTHOR(S): Kalechman, Y.; Zuloff, A.; Albeck, M.; Strassmann, G.; Sredni, B.
CORPORATE SOURCE: Marilyn Finkler Cancer Res. Center, Bar Ilan Univ., Ramat Gan, Israel

SOURCE: Blood (1995), 85(6), 1555-61
CODEN: BLOOAW; ISSN: 0006-4971
PUBLISHER: Saunders
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The immunomodulator ammonium trichloro(dioxyethylene-O-O')tellurate (AS101) has previously been found by us to have radioprotective properties when injected into mice before sublethal and LDs of irradiation AS101 also was found to protect mice from hematopoietic damage caused by various chemotherapeutic drugs. Based on these findings, phase II clin. trials with cancer patients treated with AS101, in combination with chemotherapy, are currently underway. In the present study, we wanted to assess the role of several cytokines in the radioprotection conferred by AS101. We show that the administration of neutralizing antibodies against interleukin-1 (IL-1) receptor, IL-6 receptor, IL-6, tumor necrosis factor (TNF), or stem cell factor (SCF) completely abrogates the ability of AS101 to increase the survival of lethally γ-irradiated mice. Moreover, the injection of each of these antibodies reduces the ability of As101 to increase the number of BM, spleen cells, and the number of circulating neutrophils, lymphocytes, and platelets in irradiated mice. In addition these antibodies abrogate the enhancing effect of AS101 on the secretion of IL-3, IL-6, and granulocyte-macrophage colony-stimulating factor, all of which decrease significantly in sublethally irradiated mice. By contrast, the injection of anti-IL-2 receptor antibody or control Igs to AS101-treated mice does not interfere with the radioprotective effects of the compound These results suggest a role for IL-1, IL-6, TNFα, and SCF in the radioprotective effect of AS101. Because cytokine toxicity remains a significant concern, the clin. application of AS101, which has no toxicity, is particularly valuable.

CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 15

IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(endogenous cytokines secretion role in radioprotection by immunomodulator AS101)

L84 ANSWER 31 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:413951 HCAPLUS Full-text
DOCUMENT NUMBER: 122:182095
ORIGINAL REFERENCE NO.: 122:33261a,33264a
TITLE: Induction of acute phase proteins in mice and humans by treatment with AS101, an immunomodulator with radioprotective properties
AUTHOR(S): Kalechman, Yona; Shani, Adi; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: C.A.I.R. Institute, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: Immunopharmacology (1995), 29(2), 149-58
CODEN: IMMUDP; ISSN: 0162-3109
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB AS101 (ammonium trichloro(dioxyethylene-0,0')tellurate) is a new synthetic compound previously described by us as having immunomodulating properties and minimal toxicity. Phase II clin. trials are currently in progress with AS101 on cancer patients. AS101 has been recently found to have both radioprotective and chemoprotective effects on hemopoiesis of irradiated mice or mice treated with various chemotherapeutic drugs. The present research was designed to study the in vivo induction of liver acute phase proteins

secretion in mice or patients treated with AS101. Induction of these proteins, some of which have the capacity to scavenge free radicals, may contribute to radioprotection. We present evidence that treatment with the immunomodulator AS101 increases production of a variety of acute phase proteins. We demonstrate a significant elevation of serum amyloid A (SAA) in sera of treated mice, as well as an increase in SAA, factor B and ceruloplasmin in sera of patients treated with AS101. The same AS101 treatment was shown to decrease the amount of the neg. acute phase protein, albumin. In addition we show that IL-1, IL-6 and TNF-α are important mediators of changes in SAA concns. induced by AS101. Abrogation of SAA production in AS101 treated mice by any one of the anti IL-1R, IL-6R or TNF-α antibodies indicates that at least in mice, SAA production is not controlled by a single extracellular signal, but rather it is regulated, at the least, by all three cytokines in various combinations. A better understanding of the mechanism by which AS101 confers radioprotection will enable us to use it more effectively in the restoration of hemopoiesis in patients following radiation or suffering from overdose or accidental radiation.

CC 8-7 (Radiation Biochemistry)

IT 106566-58-9, AS101
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(acute phase proteins induction in mice and humans by treatment with AS101, immunomodulator with radioprotective properties)

L84 ANSWER 32 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:340279 HCAPLUS Full-text
DOCUMENT NUMBER: 122:122865
ORIGINAL REFERENCE NO.: 122:22735a,22738a
TITLE: The cytoprotective effect of the immunomodulator AS101 against hydrochloric acid-induced gastric lesions
AUTHOR(S): Xu, Ren-He; Kalechman, Yona; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: Cancer Aids and Immunology Res. Inst., Bar Ilan Univ., Ramat Gan, 52900, Israel
SOURCE: Research Communications in Molecular Pathology and Pharmacology (1995), 87(1), 4-20
CODEN: RCMPE6; ISSN: 1078-0297
PUBLISHER: PJD Publications
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The immunomodulator AS101 (an ammonium tellurate compound), given i.p. 2 h before an intragastric dose of 0.6N HCl, markedly prevented HCl-induced gastric lesions both in rats and mice. Indomethacin, a cyclooxygenase inhibitor, given i.p. at a nonulcerogenic dose of 5 mg/kg 1 h before AS101, abolished the protective effect of the latter. Mechanistic anal. showed that the gastric-cytoprotective property of AS101 appeared to be mediated through the induction of PGE2 and epidermal growth factor (EGF), both of which protect the gastric mucosa against HCl-induced ulceration, while EGF also contributes to the promotion of ulcer repair.

CC 1-9 (Pharmacology)

IT 106566-58-9, AS 101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gastric-protective activity of)

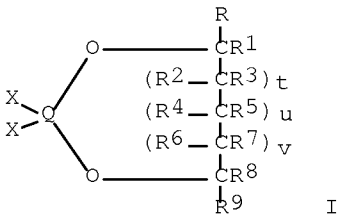
L84 ANSWER 33 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:320646 HCAPLUS Full-text
DOCUMENT NUMBER: 122:96067
ORIGINAL REFERENCE NO.: 122:17915a,17918a
TITLE: Restoration of murine cytomegalovirus (MCMV) induced

myelosuppression by AS101
AUTHOR(S): Sredni, B.; Rosenthal-Galili, Z.; Michlin, H.; Sobelman, D.; Seger, Y.; Blagerman, S.; Kalechman, Y.; Rager-Zisman, B.
CORPORATE SOURCE: C.A.I.R. Institute, The Marilyn Finkler Cancer Research Center, Bar Ilan University, Ramat Gan, 52900, Israel
SOURCE: Immunology Letters (1994), 43(3), 159-65
CODEN: IMLED6; ISSN: 0165-2478
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Infection with cytomegalovirus (CMV) continues to be one of the most common complications following allogeneic bone marrow transplantation. The gravest danger for the host occurs when the virus is reactivated as a result of immunosuppression. In this report the authors studied the effects of sublethal murine cytomegalovirus (MCMV) infection on the hemopoietic system including bone marrow (BM) cellularity, production of colony stimulating factor (CSF) and interleukin-6 (IL-6) and the development of granulocyte-macrophage colony forming units (CFU-GM), and BM stromal cell viability. The authors findings show that the virus infection led to a significant decrease in the number of BM cells and in the production levels of CSF and IL-6. There was also a decrease in the number of stromal cells, as reflected by the number of colony forming unit fibroblasts (CFU-F), and in the relative number of CFU-GM progenitors. Treatment of MCMV infected mice with the immunomodulator AS101 [ammonium trichloro(dioxyethylene-O-O')tellurate] restored significantly CSF and IL-6 production by BM cells to levels of uninfected control mice as well as the number of CFU-F and stromal cell elements which consequently led to the restoration of the total number of BM cells. Results presented here indicate that AS101 may have immunomodulatory effects on MCMV mediated myelosuppression. Administration of AS101 to patients with CMV associated BM damage may improve the restoration of their BM function.
CC 1-7 (Pharmacology)
IT 106566-58-9, AS101
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(reversal of murine cytomegalovirus-induced myelosuppression by immunostimulant AS101)

L84 ANSWER 34 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:186319 HCAPLUS Full-text
DOCUMENT NUMBER: 120:186319
ORIGINAL REFERENCE NO.: 120:32801a,32804a
TITLE: Method for protecting against the effects of radiation which is based on the administration of a selenium- or tellurium-based compound
INVENTOR(S): Sredni, Benjamin; Albeck, Michael
PATENT ASSIGNEE(S): Israel
SOURCE: U.S., 17 pp. Cont. of U.S. Ser. No. 491,681, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5271925	A	19931221	US 1992-846562	19920305 <--

PRIORITY APPLN. INFO.: US 1990-491681 B1 19900309 <--
OTHER SOURCE(S): MARPAT 120:186319
GI



I

AB Radioprotection, especially protection from hematopoietic damage in humans and other animals caused by irradiation, is provided by administration of TeO2, PhTeCl3, a Te halide, Ph4+P[TeCl3(O2C2H4)], I (R-R9 = H, OH, C1-5 alkyl, C1-5 hydroxyalkyl, C1-5 haloalkyl, C1-5 alkanoyloxy, C1-5 carboxyalkyl, acyl, NH2, cyano, etc.; Q = Te, Se; X = halo; t, u, v = 0, 1), or a I K or ammonium salt. Thus, ammonium trichloro(dioxoethylene-O,O')tellurate induced secretion of the known radioprotectant, interleukin-1, by bone marrow, spleen, and peritoneal exudate cells of mice and prevented the decrease in colony-stimulating factor secretion by spleen and bone marrow cells caused by whole-body γ-irradiation
IC ICM A61K031-335
ICS A61K049-00
INCL 424010000
CC 8-9 (Radiation Biochemistry)
IT 7446-07-3, Tellurium dioxide 29510-67-6, Phenyltellurium trichloride 77593-49-8 77593-50-1 106566-58-9
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as radioprotectant, for bone marrow)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 35 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:94967 HCAPLUS Full-text
DOCUMENT NUMBER: 120:94967
ORIGINAL REFERENCE NO.: 120:16663a,16666a
TITLE: The protective role of ammonium trichloro(dioxoethylene-O,O')tellurate in combination with several cytotoxic drugs acting by different mechanisms of action
AUTHOR(S): Kalechman, Yona; Shani, Adi; Sotnik-Barkai, Iris; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: CAIR Inst., Bar Ilan Univ., Ramat Gan, 59200, Israel
SOURCE: Cancer Research (1993), 53(24), 5962-9
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Pretreatment of mice with with the title immunomodulator (AS101) protected them from the lethal effects of several chemotherapeutic drugs acting by distinct mechanisms. At sublethal doses, AS101 could prevent hemopoietic damage caused by the drugs. A higher proportion of colony-forming cells granulocyte-macrophage as well as a higher level of colony stimulating factor secretion by bone marrow (BM) cells was observed in mice pretreated with AS101 before injection of doxorubicin or cyclohexylchloroethylnitrosourea. Moreover, a higher rate of survival was observed in mice injected with AS101

before treatment with LDs of these drugs. AS101 could also rescue BM stromal cells from damages caused by doxorubicin. Injection of mice with AS101 or pretreatment of BM cells with AS101 protected BM-colony forming cells granulocyte-macrophage from the toxic effects of etoposide. The protective effects of AS101 against damages caused by a variety of cytotoxic drugs may be attributed to the ability of the compound to expand the colony-forming unit spleen subpopulation of early progenitors, those cells that are resistant to several DNA-damaging agents and are the precursor cells essential for reconstitution of the hemopoietic system. AS101, by minimizing adverse cytotoxicity resulting from a variety of drugs, may be a promising candidate for chemoimmunotherapy in cancer patients.

CC 1-6 (Pharmacology)

IT 106566-58-9, AS 101 (pharmaceutical)
RL: BIOL (Biological study)
(cytotoxic agents damage to hematopoietic system inhibition by)

L84 ANSWER 36 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:49012 HCAPLUS Full-text
DOCUMENT NUMBER: 120:49012
ORIGINAL REFERENCE NO.: 120:8887a,8890a
TITLE: Increased DNA repair ability after irradiation following treatment with the immunomodulator AS101
AUTHOR(S): Kalechman, Y.; Shani, A.; Albeck, M.; Sotnik Barkai, I.; Sredni, B.
CORPORATE SOURCE: Dep. Life Sci., Bar Ilan Univ., Ramat Gan, 52900, Israel
SOURCE: Radiation Research (1993), 136(2), 197-204
CODEN: RAREAE; ISSN: 0033-7587
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ammonium trichloro(dioxoethylene-o-o')tellurate (AS101) is a new synthetic compound previously described by the authors as being able to modulate the immune system and having minimal toxicity. Clin. trials are currently in progress with AS101 on cancer patients. AS101 has recently been found to have radioprotectant effects on hemopoiesis and survival of irradiated mice when administered prior to irradiation Radioprotection conferred by AS101 has recently been demonstrated by the authors to result partly from induction of progenitor cells to enter into S phase, which is assumed to be a more radioresistant phase of the cell cycle, and partly from the enhanced stimulation of CFU-S not only toward proliferation but also toward self-renewal. In the present study, the DNA repair processes expressing the cellular responses associated with the restoration of the normal nucleotide sequence after damage caused to the DNA were also shown to increase significantly after treatment with AS101. Unscheduled DNA repair synthesis was significantly higher in both spleen and bone marrow cells from mice injected with AS101 compared to mice injected with PBS. DNA repair synthesis in spleen cells incubated with AS101 in vitro was also higher than that of PBS-treated cells. This was demonstrated by equilibrium alkaline cesium chloride d. gradient of DNA from irradiated and nonirradiated spleen cells in the presence of hydroxyurea. In addition, using the neutral filter elution technique, the authors show that AS101 can both protect cells from DNA double-strand breaks (DSBs) induced by irradiation and enhance the ability of the affected cells to rejoin the DSBs. Exts. of splenocytes, either incubated with AS101 in vitro or obtained from mice injected with AS101, contain substantial DNA polymerase activity which is significantly higher compared to that of control treated cells. Aphidicolin, an inhibitor of DNA polymerases α and δ, and dideoxythymidine, an inhibitor of DNA polymerase β, inhibited DNA repair synthesis of irradiated splenocytes stimulated with AS101. These results collectively indicate that AS101 confers its radioprotective effects partly by preventing the induction of DSBs induced by irradiation and partly by

enhancing the ability of irradiated cells to repair their damaged DNA, probably by increasing mainly DNA polymerase activity. The understanding of the mechanism of radioprotection conferred by AS101 will enable the authors to use AS101 more effectively for the restoration of hemopoiesis in patients after radiation therapy or in patients suffering from overdose or accidental irradiation

CC 8-6 (Radiation Biochemistry)
Section cross-reference(s): 1, 4

IT 106566-58-9, AS101
RL: BIOL (Biological study)
(radioprotection by, of hematopoietic cell against gamma ray, DNA repair ability in relation to)

L84 ANSWER 37 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:45942 HCAPLUS Full-text
DOCUMENT NUMBER: 120:45942
ORIGINAL REFERENCE NO.: 120:8223a,8226a
TITLE: Method of treating or preventing alopecia from chemotherapy
INVENTOR(S): Sredni, Benjamin; Albeck, Michael
PATENT ASSIGNEE(S): Israel
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5262149	A	19931116	US 1992-929681	19920813 <--
EP 583026	A1	19940216	EP 1993-202226	19930728 <--
EP 583026	B1	19960918		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 142875	T	19961015	AT 1993-202226	19930728 <--
ES 2093357	T3	19961216	ES 1993-202226	19930728 <--
US 6552089	B1	20030422	US 1996-758106	19961129 <--
PRIORITY APPLN. INFO.:			US 1992-929681 A	19920813 <--
			US 1993-109654 B1	19930820 <--
			US 1995-391073 B1	19950217 <--

OTHER SOURCE(S): MARPAT 120:45942

AB A method for treating or preventing alopecia which is induced by an antineoplastic compound is disclosed which is based on the administration of a particular tellurium or selenium derivative to a patient prior to the administration of an antineoplastic agent to the patent. Thus, arabinoside C was i.p. injected alone or with ammonium trichloro(O,O'-dioxoethylene)tellurate (I) to rats for 7 days. The results showed that the addition of I to a treatment regimen completely avoids alopecia when given daily and provided some protection from alopecia when given every other day.

IC ICM A61K031-355
ICS A61K049-00

INCL 424010000

CC 1-6 (Pharmacology)

IT 7446-07-3, Tellurium dioxide 7446-07-3D, Tellurium dioxide, complexes 7782-49-2D, Selenium, compds. 29510-67-6, Phenyltellurium trichloride 106566-58-9
RL: BIOL (Biological study)
(alopecia from chemotherapy prevention by)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 38 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1994:45430 HCAPLUS Full-text
DOCUMENT NUMBER: 120:45430
ORIGINAL REFERENCE NO.: 120:8099a,8102a
TITLE: AS-101: A modulator of in vitro T-cell proliferation
AUTHOR(S): Montero, Regina; Gonsebatt, Maria Eugenia; Gerson, Raquel; Rojas, Emilio; Herrera, Alonso; Ostrosky-Wegman, Patricia
CORPORATE SOURCE: Inst. Inves. Biomed., UNAM, Mexico City, Mex.
SOURCE: Anti-Cancer Drugs (1993), 4(3), 351-4
CODEN: ANTDEV; ISSN: 0959-4973
DOCUMENT TYPE: Journal
LANGUAGE: English
AB AS-101 is a tellurate compound originally designed as a drug with cytostatic activity. Nevertheless, in vivo it was found to be an immunomodulator agent due to a stimulation of cytokine production The Mitotic Index (MI), an indicator of cytotoxicity, and cell proliferation kinetics (CPK) in lymphocyte cultures, are parameters used in the evaluation of the antineoplastic activity of drugs such as mitomycin-C and cisplatin. For this reason, the authors evaluated the effects of AS-101 upon these two parameters. The results show that AS-101 produces an inhibition of MI in proliferating lymphocytes higher than the inhibition mediated by cisplatin. When CPK was evaluated, AS-101 induced a retardation not related with dose, while cisplatin produced a stepwise inhibition. This effect contrasts with the stimulation observed when AS-101 was added to non-proliferating lymphocytes which was measured as an increased [3H]thymidine incorporation in culture. The results confirm the mode of action of AS-101 as a real modulating agent of cell proliferation.
CC 1-7 (Pharmacology)
IT 106566-58-9, AS-101
RL: BIOL (Biological study)
(T-cell proliferation stimulation by)

L84 ANSWER 39 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1993:247120 HCAPLUS Full-text
DOCUMENT NUMBER: 118:247120
ORIGINAL REFERENCE NO.: 118:42627a,42630a
TITLE: Protection of bone marrow stromal cells from the toxic effects of cyclophosphamide in vivo and of ASTA-Z 7557 and etoposide in vitro by ammonium trichloro(dioxyethylene-O-O')tellurate (AS101)
AUTHOR(S): Kalechman, Yona; Sotnik-Barkai, Iris; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: Cancer AIDS Immunol. Res. Inst., Bar Ilan Univ., Ramat Gan, 52900, Israel
SOURCE: Cancer Research (1993), 53(8), 1838-44
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The immunomodulator AS101 has previously been shown to protect mice from lethal and sublethal doses of cyclophosphamide (CYP). AS101 was also shown to protect BM granulocyte-macrophage colony-forming cells from the toxic effects of ASTA-Z 7557. In the present study we examined the ability of AS101 to protect functional properties of BM stromal cells from the toxic effects of CYP in vivo or ASTA-Z in vitro. The functional properties of stromal cells from CYP-injected mice were tested with respect to stromal cell number and viability as reflected by the number of colony-forming unit fibroblasts, the ability of established stromal layers to secrete colony-stimulating factor and interleukin 6, as well as the capacity to support hemopoietic cells. All of these parameters were tested from day 1 to day 7 after CYP treatment. We

demonstrate that all stromal functions are severely damaged following CYP treatment. Pretreatment of mice with 10 μg AS101 24 h before injection of 250 mg/kg CYP resulted in a significant amelioration of stromal cell functions as early as 24 h following CYP treatment. In addition we show that prior incubation of BM cells with AS101 protects the development of stromal colony-forming unit fibroblasts from the toxic effects of ASTA-Z, a potent derivative of CYP, and etoposide, a derivative of podophyllotoxin. These results strongly suggest the usefulness of AS101 in counteracting chemotherapy-induced BM microenvironmental suppression and the important role of the compound as an adjunct treatment of cancer when used in combination with CYP. The data also suggest the effectiveness of AS101 in purging bone marrow when used concomitantly with ASTA-Z or etoposide.

CC 1-6 (Pharmacology)

IT 106566-58-9, AS101
RL: BIOL (Biological study)
(bone marrow protection from antitumor agents by)

L84 ANSWER 40 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1993:93984 HCAPLUS Full-text
DOCUMENT NUMBER: 118:93984
ORIGINAL REFERENCE NO.: 118:16237a,16240a
TITLE: The effect of AS101 on the reconstitution of T-cell reactivity following irradiation or cyclophosphamide treatment
AUTHOR(S): Kalechman, Yona; Sotnik-Barkai, Iris; Albeck Michael; Sredni, Benjamin
CORPORATE SOURCE: C.A.I.R. Inst., Bar Ilan Univ., Ramat Gan, Israel
SOURCE: Experimental Hematology (New York, NY, United States) (1992), 20(11), 1302-8
CODEN: EXHMA6; ISSN: 0301-472X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB AS101 (ammonium trichloro[dioxyethylene-O,O']tellurate) has immunomodulating properties and minimal toxicity. AS101 has also radioprotective and chemoprotective effects on hemopoiesis in irradiated mice or mice treated with cyclophosphamide (CYP). The effect of AS101 on the recovery of the immune system from sublethal irradiation or CYP treatment was assessed in mice. Mice were injected once with AS101 24 h before being irradiated with 450 cGy or treated with 250 mg CYP/kg. AS101 reduced the decrease in the number of spleen cells and thymocytes, the decrease in the proliferation response of these cells to the T-cell mitogen Con A, and the decrease of interleukin 2 secretion by spleen cells. AS101 initially protected these functions because they were increased over control levels 24 h after treatment. AS101 also normalized the distribution of T-cell subsets that was impaired following both treatments. The results suggest an immunoregulatory role for AS101 in counteracting the chemotherapy and radiation-induced immunol. suppression as well as its usefulness as an adjunct treatment of cancer when used in combination with CYP or irradiation

CC 1-7 (Pharmacology)
Section cross-reference(s): 8

IT 106566-58-9, AS-101 pharmaceutical
RL: BIOL (Biological study)
(immunity and T-lymphocyte recovery by, after irradiation and cyclophosphamide treatment)

L84 ANSWER 41 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1992:524078 HCAPLUS Full-text
DOCUMENT NUMBER: 117:124078
ORIGINAL REFERENCE NO.: 117:21337a,21340a
TITLE: Inhibition of the reverse transcriptase activity and

replication of human immunodeficiency virus type 1 by AS 101 in vitro
AUTHOR(S): Vonsover, Ami; Loya, Shoshana; Sredni, Benjamin; Albeck, Michael; Gotlieb-Stematsky, Tamar; Araf, Orly; Hizi, Amnon
CORPORATE SOURCE: Cent. Virol. Lab., Chaim Sheba Med. Cent., Tel-Hashomer, Israel
SOURCE: AIDS Research and Human Retroviruses (1992), 8(5), 613-23
CODEN: ARHRE7; ISSN: 0889-2229
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In a search for compds. active against human immunodeficiency virus type 1 (HIV-1), it was found that the novel low-mol. weight immunoenhancer ammonium trichloro(dioxyethylene-O,O'-) tellurate (AS101) suppresses production of HIV-1 in vitro. Treatment of HIV-1-infected peripheral blood mononuclear cells (PBMC) with increasing concns. of AS101 resulted in substantial inhibition of virus production as measured by both reverse transcriptase (RT) activity and antigen presence in supernatants of treated cells. AS101 had no effect on PBMC viability, growth, or morphol. up to a concentration of 15 μM for 14 days. To elucidate a possible mechanism for the inhibition of AS101, the authors have analyzed the effect of the drug on the catalytic functions associated with HIV RT, namely the RDDP, DDDP, and RNase H activities. RDDP and DDDP activities were impaired by the drug with calculated IC50 value of about 4 μM. On the other hand, the RNase H activity was less sensitive to AS101, with an apparent IC50 value of about 30 μM. The anti-HIV-1 activity of AS101 as reflected by inhibition of the different catalytic functions associated with viral RT, in the absence of drug-related toxicity to lymphocytes, together with its immunomodulating activity strongly argues in favor of its evaluation, as a therapeutic agent for patients with HIV infection.
CC 1-5 (Pharmacology)
IT 106566-58-9, AS 101
RL: BIOL (Biological study)
(reverse transcriptase activity and replication of human immunodeficiency virus type 1 inhibition by)

L84 ANSWER 42 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1992:483106 HCAPLUS Full-text
DOCUMENT NUMBER: 117:83106
ORIGINAL REFERENCE NO.: 117:14283a,14286a
TITLE: In vivo synergistic effect of the immunomodulator AS101 and the PKC inducer bryostatin
AUTHOR(S): Kalechman, Y.; Albeck, M.; Sredni, B.
CORPORATE SOURCE: Dep. Life Sci., Bar Ilan Univ., Ramat Gan, 59200, Israel
SOURCE: Cellular Immunology (1992), 143(1), 143-53
CODEN: CLIMB8; ISSN: 0008-8749
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The immunomodulator AS101 has recently been found to have radioprotective properties when injected prior to sublethal and LDs of irradiation In addition, this compound was found to protect mice from hemopoietic damage caused by sublethal doses of cyclophosphamide (CYP) and to increase the rate of survival of mice treated with LDs of CYP. AS101 was previously shown to exert a synergistic effect with the PKC-inducer bryostatin in cytokine secretion in vitro. The present studies were designed to evaluate the effects of in vivo combined treatment with AS101 and bryostatin on bone marrow and spleen cellularity and on the number of committed progenitors in the bone

marrow at various points of time after their treatment with a sublethal dose of CYP or irradiation In addition, the combined effect was tested on the survival of mice irradiated with a LD of irradiation The data show the presence of synergism which greatly enhances the number of bone marrow and spleen cells 48 h and 9 days after CYP treatment or irradiation The combined effect was also demonstrated when bone marrow colony-forming units granulocyte-macrophage (CFU-GM) progenitor cells were evaluated. Moreover, AS101 and bryostatin synergized in their protective effects against lethal damages of irradiation Thus, bryostatin, which lacks tumor-promoting activity, is a particularly good candidate in combination with AS101 for treatment in vivo in counteracting chemotherapy- or radiation-induced hematopoietic suppression or in generally improving the restoration of immune response under conditions involving immune or hemopoietic damage.

CC 1-7 (Pharmacology)
Section cross-reference(s): 15

IT 106566-58-9, AS101
RL: BIOL (Biological study)
(bryostatin synergism with, in immunostimulation and hematopoiesis)

L84 ANSWER 43 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1992:422545 HCAPLUS Full-text
DOCUMENT NUMBER: 117:22545
ORIGINAL REFERENCE NO.: 117:3997a,4000a
TITLE: The immunomodulator AS101 administered orally as a chemoprotective and radioprotective agent
AUTHOR(S): Sredni, B.; Albeck, M.; Kazimirsky, G.; Shalit, F.
CORPORATE SOURCE: Dep. Life Sci., Bar Ilan Univ., Ramat Gan, 52900, Israel
SOURCE: International Journal of Immunopharmacology (1992), 14(4), 613-19
CODEN: IJIMDS; ISSN: 0192-0561
DOCUMENT TYPE: Journal
LANGUAGE: English

AB AS101 [ammonium-trichloro (0,0' dioxyethylene)tellurate], a new immunomodulator, stimulates the production of various cytokines in vitro and in vivo, and to have minimal toxicity. In the present study, the possibility was explored of oral administration of AS101 to mice via cannulation in lieu of i.p. or i.v. administration reported to date. Oral administration of AS101 at a dose ranging 50-100 μg/mouse promotes hemopoietic regeneration after treatment with sublethal doses of cyclophosphamide and protects mice from the lethal effects of this compound In addition, AS101 administered orally confers a strong radioprotective effect upon mice when given before γ-irradiation

CC 8-9 (Radiation Biochemistry)
Section cross-reference(s): 1

IT 106566-58-9, AS101
RL: BIOL (Biological study)
(immunomodulator, chemoprotectant and radioprotectant activities of)

L84 ANSWER 44 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1992:6117 HCAPLUS Full-text
DOCUMENT NUMBER: 116:6117
ORIGINAL REFERENCE NO.: 116:1211a,1214a
TITLE: Reactions of tellurium tetrahalides with glycols
AUTHOR(S): Zingaro, Ralph A.; Pathirana, Hema M. K. K.; Reibenspies, Joseph H.; Meyers, Edward A.
CORPORATE SOURCE: Dep. Chem., Texas A and M Univ., College Station, TX, 77843, USA
SOURCE: Phosphorus, Sulfur and Silicon and the Related Elements (1991), 62(1-4), 91-9
CODEN: PSSLEC; ISSN: 1042-6507

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 116:6117
AB Tellurium tetrahalides undergo reaction with glycols to yield 3 different products: O,O'-dioxotrihalotellurates, bis(alkoxy)dihalotellurium(IV) compds. and hexahalotellurates. The course of the reaction appears to be determined primarily by the nature of the glycol. The structure of dichlorobis(cis-2-hydroxycyclohexyloxy)tellurium(IV) has been determined crystallog.
CC 23-13 (Aliphatic Compounds)
Section cross-reference(s): 1, 75
IT 16893-14-4P 106512-57-6P 106566-58-9P 137645-44-4P
137681-44-8P 137681-45-9P 137681-46-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

L84 ANSWER 45 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:670160 HCAPLUS Full-text
DOCUMENT NUMBER: 115:270160
ORIGINAL REFERENCE NO.: 115:45649a,45652a
TITLE: Use and mechanism of action of AS101 in protecting bone marrow colony forming units-granulocyte-macrophage following purging with ASTA-Z 7557
AUTHOR(S): Kalechman, Yona; Barkai, Iris Sotnik; Albeck, Michael; Horwith, Gary; Sehagl, Suren N.; Sredni, Benjamin
CORPORATE SOURCE: Dep. Life Sci., Bar Ilan Univ., Ramat Gan, 59200, Israel
SOURCE: Cancer Research (1991), 51(20), 5614-20
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Ammonium trichloro(dioxoethylene-O,O')tellurate (AS101) has been shown previously to provide radioprotective effects when given to mice 24 h prior to irradiation and to protect mice from lethal and sublethal doses of cyclophosphamide (CTX). In this study, the ability of AS101 to protect mice bone marrow colony forming units-granulocyte-macrophage treated in vitro with various doses of ASTA-Z 7557 (I) a potent derivative of CTX were examined Prior incubation with I protects colony forming units-granulocyte-macrophage from toxic effects of I. This protection can also be conferred by injection of mice with AS101 prior to incubation of their bone marrow in vitro with I. Prior incubation with AS101 was shown not to protect K562 leukemic cells or HL-60 cells from the toxic effects of I. AS101 protection from the toxic effects of I in vitro and CTX in vivo can be partially ascribed to increased aldehyde dehydrogenase (ALDH) activity induced by AS101. This was shown directly by measuring cellular ALDH activity and indirectly by measuring the toxicity of I and CTX in the presence of cyanamide, an inhibitor of ALDH. AS101 also protects spleen cells from the toxic effects of 5-fluorouracil, probably through a different mechanism. These properties of AS101 make it a useful candidate for increasing the qual. potential of bone marrow used for autologous transplantation after purging with I. In addition, the results suggest an increase in ALDH activity by AS101 as one of the mechanisms of protection from the toxic effects of I and CTX. However, the chemoprotectiveness of AS101 was not restricted to cyclophosphamide, since as shown in this study, AS101 helped by other mechanisms to reconstitute the number of spleen cells after 5-fluorouracil treatment.
CC 1-6 (Pharmacology)
IT 106566-58-9, AS101
RL: BIOL (Biological study)
(bone marrow autotransplant protection by, following leukemia purging with cyclophosphamide analog)

L84 ANSWER 46 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:178041 HCAPLUS Full-text
DOCUMENT NUMBER: 114:178041
ORIGINAL REFERENCE NO.: 114:29818h,29819a
TITLE: Protective and restorative role of AS101 in combination with chemotherapy
AUTHOR(S): Kalechman, Yona; Albeck, Michael; Oron, Mor; Sobelman, Darit; Gurwith, Marc; Horwith, Gary; Kirsch, Ted; Maida, Bernadette; Sehgal, Suren N.; Sredni, Benjamin
CORPORATE SOURCE: CAIR Inst., Bar Ilan Univ., Ramat Gan, 59200, Israel
SOURCE: Cancer Research (1991), 51(5), 1499-503
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The immunomodulator AS101 has been found previously by us to stimulate the secretion of high levels of interleukin 1 and colony stimulating factor (CSF) in vitro, as well as the production of CSF in vivo in mice models. These cytokines are known to induce proliferation and differentiation of hematopoietic progenitor cells from the spleen and bone marrow (BM) and to protect mice from DNA-damaging agents. The present studies were designated to evaluate the effects of prolonged treatment with AS101 on myelopoiesis, BM cellularity, and CSF secretion in mice treated with a sublethal dose of cyclophosphamide (CYP) and on the survival of mice undergoing treatment with LDs of this compound In this model, the hematopoietic progenitors were suppressed during the overbound phase of myelopoiesis resulting from the cytotoxic effects of CYP. This allowed the detected of a proliferative effect as AS101 in vivo on BM colony-forming units granulocyte-macrophage progenitor cells, BM cellularity, and the secretion of CSF. Moreover, AS101 protected these animals from the lethal effects of high doses of CYP. These protective effects were demonstrable only when AS101 was administered to mice prior to CYP treatment. The only exception was CSF secretion by spleen cells that had been reconstituted when AS101 was administered both prior to and following CYP treatment. AS101 was found to have a synergistic effect with CYP in the treatment of tumor-bearing mice, suggesting that the combination of these two modalities provides a more effective treatment of their tumors. These results strongly suggest an immunoregulatory role for AS101 in counteracting the chemotherapy-induced hematopoietic suppression as well as usefulness as adjunct treatment of cancer when used in combination with CYP.
CC 1-7 (Pharmacology)
Section cross-reference(s): 15
IT 106566-58-9, AS 101
RL: BIOL (Biological study)
(hematopoietic suppression from chemotherapy prevention by)

L84 ANSWER 47 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:75222 HCAPLUS Full-text
DOCUMENT NUMBER: 114:75222
ORIGINAL REFERENCE NO.: 114:12651a,12654a
TITLE: Method using tellurium compounds for the stimulation of bone marrow cells
INVENTOR(S): Sredni, Benjamin; Albeck, Michael
PATENT ASSIGNEE(S): Bar Ilan University, Israel
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 372620	A2	19900613	EP 1989-203002	19891127 <--
EP 372620	A3	19910320		
EP 372620	B1	19930908		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
IL 92352	A	19960331	IL 1989-92352	19891117 <--
AT 94060	T	19930915	AT 1989-203002	19891127 <--
AU 8945633	A	19900621	AU 1989-45633	19891128 <--
AU 629577	B2	19921008		
KR 200185	B1	19990615	KR 1989-17531	19891130 <--
CA 2004461	A1	19900602	CA 1989-2004461	19891201 <--
CA 2004461	C	20020219		
DK 8906078	A	19900603	DK 1989-6078	19891201 <--
JP 02200630	A	19900808	JP 1989-314118	19891201 <--
JP 3067779	B2	20000724		
PRIORITY APPLN. INFO.:			US 1988-278957 A	19881202 <--
			EP 1989-203002 A	19891127 <--

OTHER SOURCE(S): MARPAT 114:75222

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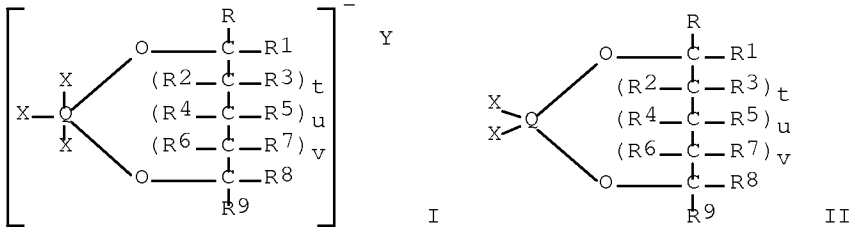

I II

AB The title compds. include e.g. TeO2, PhTeCl3, I [Q = Te, Se; t, u, v = 0, 1; R, R1-R9 = H, C1-5 (hydroxy)alkyl, OH, halo, etc.; Y = cation; X = halo], or II (Q, t, u, v, R, R1-R9, Y, X as above) and are provided for stimulation of proliferation or differentiation of bone marrow cells. Methods of bone marrow transplantation making use of the Te compds. of the invention are disclosed. Administration of trichloro(dioxoethylene-O,O')tellurate (III) in conjunction with a bone marrow transplant provides a method of enhancing the reconstitution of the immune system which has been damaged by exposure to high-dose chemotherapy or by exposure to radiation. Thus, I increased the survival of 137Cs-irradiated mice as well as the number of spleen cell colonies developing from the transplanted bone marrow.

IC ICM A61K031-095

CC 1-8 (Pharmacology)
Section cross-reference(s): 8, 15

IT 7446-07-3, Tellurium dioxide 13494-80-9, Tellurium, biological studies 13494-80-9D, Tellurium, halides 29510-67-6 77593-49-8 77593-50-1
RL: BIOL (Biological study)
(bone marrow cell stimulation by, transplantation in relation to)

L84 ANSWER 48 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:545053 HCAPLUS Full-text
DOCUMENT NUMBER: 113:145053
ORIGINAL REFERENCE NO.: 113:24429a,24432a
TITLE: Cytokine secretion effected by synergism of the

immunomodulator AS101 and the protein kinase C inducer bryostatin
AUTHOR(S): Sredni, B.; Kalechman, Y.; Albeck, M.; Gross, O.; Aurbach, D.; Sharon, P.; Sehgal, S. N.; Gurwith, M. J.; Michlin, H.
CORPORATE SOURCE: CAIR Inst., Bar Ilan Univ., Ramat Gan, 52900, Israel
SOURCE: Immunology (1990), 70(4), 473-7
CODEN: IMMUAM; ISSN: 0019-2805
DOCUMENT TYPE: Journal
LANGUAGE: English
AB AS101, a synthetic organotellurium compound, was found to have immunomodulating properties by initiation of cytokine production in vitro and in vivo. Phase I/II clin. trials currently in progress on AIDS and cancer patients treated with AS101 show significant increases in various immunol. parameters, with minimal toxicity. Recently, AS101 and the protein kinase C (PKC) inducer, phorbol myristate acetate (PMA), were shown to synergize in the secretion of interleukin-2 (IL-2) and colony-stimulating factor (CSF) in vitro, by human and mouse lymphoid cells. In this study, the authors investigated the synergistic effect of AS101 and a partially purified preparation of bryostatin on the production of several cytokines. These confirm the presence of synergism, which greatly enhances cell proliferation, IL-2, tumor necrosis factor (TNF) and interferon-gamma (IFN-γ) secretion by human mononuclear cells (MNC) and the production of IL-2 and TNF by mouse cells. The absence of tumor-promoting activity of the bryostatins makes them particularly good candidates, in combination with AS101, for immunomodulation in vivo in clin. immunosuppressed conditions.
CC 1-7 (Pharmacology)
Section cross-reference(s): 15
IT 106566-58-9, AS101
RL: BIOL (Biological study)
(cytokine secretion response to bryostatin and)

L84 ANSWER 49 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:229726 HCAPLUS Full-text
DOCUMENT NUMBER: 112:229726
ORIGINAL REFERENCE NO.: 112:38567a,38570a
TITLE: Selenium and tellurium complexes and method for the induction of in vivo and vitro production of cytokines
INVENTOR(S): Albeck, Michael; Sredni, Benjamin
PATENT ASSIGNEE(S): Israel
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 311138	A2	19890412	EP 1988-116788	19881010 <--
EP 311138	A3	19900718		
EP 311138	B1	19940413		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4962207	A	19901009	US 1987-107131	19871009 <--
US 5093135	A	19920303	US 1987-136396	19871222 <--
AT 104292	T	19940415	AT 1988-116788	19881010 <--
ES 2051814	T3	19940701	ES 1988-116788	19881010 <--
JP 01238580	A	19890922	JP 1988-255760	19881011 <--
JP 2749596	B2	19980513		
US 5102908	A	19920407	US 1990-531887	19900601 <--

PRIORITY APPLN. INFO.:

US 1987-107131	A	19871009 <--
US 1984-599511	B2	19840412 <--
US 1985-712549	B2	19850315 <--
US 1985-782129	A2	19850930 <--
US 1987-57799	A3	19870603 <--
EP 1988-116788	A	19881010 <--

OTHER SOURCE(S): MARPAT 112:229726

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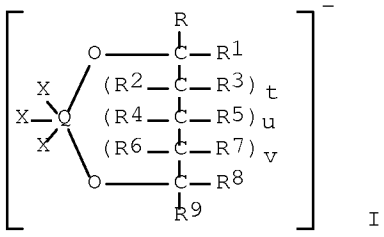

I

AB Cytokine formation is stimulated in vivo or in vitro with salts of I (Q = Se, Te; X = halo; R, R1-R9 = H, OH, halo, hydroxyalkyl, alkoxy, alkyl, haloalkyl, acyl, etc.; t, u, v = O ,1). I are useful for treatment of AIDS, cancer, and autoimmune and infectious diseases. Thus, TeCl4 and KCl were heated in ethylene glycol to produce I (Q = Te; X = Cl; R, R1, R8, R9 = H; t, u, v = O) (II). Interleukin 2 production by cultured mouse spleen cells was maximally stimulated by II K salt at 0.5 μg/mL in the presence of PMA.

IC ICM C07D329-00
ICS A61K031-33

CC 1-7 (Pharmacology)
Section cross-reference(s): 15, 78

IT 106566-58-9 127378-98-7
RL: BIOL (Biological study)
(cytokine formation stimulation by)

L84 ANSWER 50 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:196585 HCAPLUS Full-text
DOCUMENT NUMBER: 112:196585
ORIGINAL REFERENCE NO.: 112:33225a,33228a
TITLE: Cytokine-inducing activity of complexes of tellurium and selenium derivatives
INVENTOR(S): Sredni, Benjamin; Albeck, Michael; Pavliv, Leo
PATENT ASSIGNEE(S): Bar Ilan University, Israel
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 333263	A1	19890920	EP 1989-200601	19890309 <--
EP 333263	B1	19940105		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4929739	A	19900529	US 1988-172643	19880324 <--
ZA 8901626	A	19900328	ZA 1989-1626	19890302 <--

IL 89462	A	19940731	IL 1989-89462		19890302 <--
AT 99684	T	19940115	AT 1989-200601		19890309 <--
ES 2061932	T3	19941216	ES 1989-200601		19890309 <--
DK 8901206	A	19890915	DK 1989-1206		19890313 <--
DK 167148	B1	19930906			
BR 8901161	A	19891031	BR 1989-1161		19890313 <--
CA 1327047	C	19940215	CA 1989-593561		19890313 <--
KR 156543	B1	19981201	KR 1989-3041		19890313 <--
AU 8931279	A	19890914	AU 1989-31279		19890314 <--
AU 608955	B2	19910418			
FI 8901205	A	19890915	FI 1989-1205		19890314 <--
FI 91753	B	19940429			
FI 91753	C	19940810			
HU 50353	A2	19900129	HU 1989-1222		19890314 <--
HU 206122	B	19920828			
JP 02042056	A	19900213	JP 1989-63417		19890314 <--
US 5475030	A	19951212	US 1993-123422		19930917 <--
PRIORITY APPLN. INFO.:			US 1988-167584	A	19880314 <--
			US 1988-172643	A	19880324 <--
			EP 1989-200601	A	19890309 <--
			US 1990-500296	B1	19900327 <--

OTHER SOURCE(S): MARPAT 112:196585

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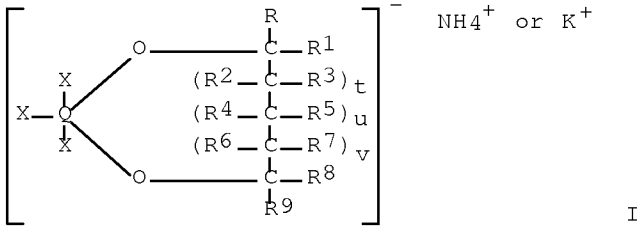


I

AB A complex of, e.g., I (Q = Te, Se; t, u, v, = 0, 1; R, R1-9 = H, C1-5 hydroxyalkyl, OH, C1-5 alkyl, halo, C1-5 haloalkyl, etc.; X = halo) with a nontoxic pharmaceutically acceptable complexing agent shows cytokine-inducing activity when contacting lymphokine-producing cells with such complexes. The complexing agents are hydroxy polycarboxylic acids, polycarboxylic acids or polyhydroxy polycarboxylic acids. The complexes show enhanced water solubility compared to the uncomplexed compds. In vitro expts. indicated that ammonium trichloro(dioxoethylene-O,O) tellurate-citrate complex was effective in inducing interleukin 2 activity in spleen cells from male BALB/c mice.

IC ICM C07D329-00
ICS C07C163-00; C07C165-00; A61K031-095; A61K031-33; A61K033-04

CC 15-5 (Immunochemistry)
Section cross-reference(s): 78

IT 77-92-9D, Citric acid, complexes with organotellurium or organoselenium compds. 87-69-4D, Tartaric acid, complexes with organotellurium or organoselenium compds. 994-36-5D, Sodium citrate, complexes with organotellurium or organoselenium compds. 7446-07-3D, Tellurium dioxide, complexes with complexing agents 7782-49-2D, Selenium, organo-, complexes with complexing agents 13494-80-9D, Tellurium, organo-, complexes with complexing agents 29510-67-6D, complexes with complexing

agents 40968-90-9D, Potassium tartrate, complexes with organotellurium or organoselenium compds. 77593-50-1D, complexes with complexing agents 106566-58-9D, complexes with citrate and tartrate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(cytokine-inducing activity of)

L84 ANSWER 51 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:151463 HCAPLUS Full-text
DOCUMENT NUMBER: 112:151463
ORIGINAL REFERENCE NO.: 112:25391a,25394a
TITLE: The effect of the immunomodulator agent AS101 on interleukin-2 production in systemic lupus erythematosus (SLE) induced in mice by a pathogenic anti-DNA antibody
AUTHOR(S): Blank, M.; Sredni, B.; Albeck, M.; Mozes, E.; Shoenfeld, Y.
CORPORATE SOURCE: Dep. Med., Sheba Med. Cent., Tel Hashomer, 52621, Israel
SOURCE: Clinical and Experimental Immunology (1990), 79(3), 443-7
CODEN: CEXIAL; ISSN: 0009-9104
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The role of the synthetic immunomodulator AS101 on the production of interleukin-2 (IL-2) by spleen cells of mice with SLE was investigated. BALB/c female mice, in which SLE was induced by immunizations with the pathogenic idiotype of anti-DNA antibody 16/6 Id, were treated with AS101 for 7 wk 2 and 4 mo after induction of the disease. The ability of the splenocytes of the mice with SLE to produce IL-2 was restored after administration of AS101. This effect was particularly impressive when the 7-wk AS101 treatment was initiated 4 mo after immunization. Despite its beneficial effect on IL-2 production, AS101 exerted no influence on the titers of autoantibodies in the sera of the mice. It also had no effect on clin. parameters of SLE, such as the increased sedimentation rate, proteinuria and low white blood cell counts. Apparently, defective IL-2 production in SLE is probably secondary to other disease processes and is not necessarily associated with the production of autoantibodies in this disorder.
CC 1-7 (Pharmacology)
Section cross-reference(s): 15
IT 106566-58-9, AS101
RL: BIOL (Biological study)
(interleukin-2 production by splenocytes response to, in systemic lupus erythematosis)

L84 ANSWER 52 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:132062 HCAPLUS Full-text
DOCUMENT NUMBER: 112:132062
ORIGINAL REFERENCE NO.: 112:22137a,22140a
TITLE: Synergism between AS101 and PMA in lymphokine production
AUTHOR(S): Sredni, B.; Kalechman, Y.; Shalit, F.; Albeck, M.
CORPORATE SOURCE: Bar Ilan Univ., Ramat Gan, 52100, Israel
SOURCE: Immunology (1990), 69(1), 110-16
CODEN: IMMUAM; ISSN: 0019-2805
DOCUMENT TYPE: Journal
LANGUAGE: English
AB AS101 [ammonium trichloro (dioxyethylene-o-o') tellurate] has been reported to stimulate normal mouse and human lymphoid cells to proliferate and to produce lymphokines such as interleukin-2 (IL-2) and colony-stimulating factor (CSF),

regulators of lymphopoiesis and myelopoiesis. The IL-2 secretion and cell proliferation of both human and mouse lymphocytes, and the production of CSF by mouse spleen cells, was enhanced by the synergistic effect of AS101 and phorbol myristate acetate (PMA). AS101-induced activation was very sensitive to inhibition by EGTA, the Ca2+ channel blocker, nifedipine, and cyclosporin A (CsA), an agent which selectively suppresses Ca2+-activated steps in this process. AS101 may efficiently trigger the Ca2+ signal required to initiate lymphocyte activation, but the enhancement observed when cells are stimulated with both AS101 and PMA may be due to the generation of a second signal, probably the activation of protein kinase C.

CC 1-7 (Pharmacology)

IT 106566-58-9, AS101
RL: BIOL (Biological study)
(lymphokine formation synergistic enhancement by phorbol myristate acetate and)

L84 ANSWER 53 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:357 HCAPLUS Full-text
DOCUMENT NUMBER: 112:357
ORIGINAL REFERENCE NO.: 112:63a,66a
TITLE: Toxicity study in rats of a tellurium based immunomodulating drug, AS-101: a potential drugs for AIDS and cancer patients
AUTHOR(S): Nyska, Avraham; Waner, Trevor; Pirak, Michael; Albeck, Michael; Sredni, Benjamin
CORPORATE SOURCE: Life Sci. Res. Israel, Ness Ziona, 70451, Israel
SOURCE: Archives of Toxicology (1989), 63(5), 386-93
CODEN: ARTODN; ISSN: 0340-5761
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Male and female Sprague Dawley rats were injected i.p. for 4 wk with ammonium trichloro (dioxyethylene-0-0'-) tellurate, an immunomodulating drug at doses ranging from 3 to 24 mg/kg/wk. Routine laboratory examns. included body weight, food consumption, clin. chemical and hematol. examns. At termination of the experiment, all rats were sacrificed and subjected to a detailed necropsy. Few mortalities were recorded during the course of the study. Clin. signs included hind limb paresis and paraphimosis. A garlic odor pervaded the room. Body weight and food consumption were adversely affected in a dose-related manner. Effects were elicited on the hematol. system; changes were noted in the platelet and leukocyte counts as well. Clin. chemical evaluation revealed signs of hepatoxicity, especially in the female treated groups. The level of β-globulin was increased. At necropsy organs were found to have a grayish-blue discoloration. Tellurium related histopathol. changes were observed in the eyes, liver, thymus, bone marrow, heart and kidneys. An attempt has been made to compare the toxicity of this drug with other tellurium-containing compds. A good correlation was found. Novel effects of the drug were retinopathy and replacement of bone marrow by bony or fibrous tissue. The possibility that some of the effects may have been elicited due to selenium-vitamin E deficiency has been considered.

CC 1-7 (Pharmacology)

IT 106566-58-9, AS-101
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(toxicity of)

L84 ANSWER 54 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:346 HCAPLUS Full-text
DOCUMENT NUMBER: 112:346
ORIGINAL REFERENCE NO.: 112:59a,62a
TITLE: Effect of the new immunoregulator AS-101 on in vitro functions of mononuclear cells from patients with

systemic lupus erythematosus
AUTHOR(S): Alcocer-Varela, J.; Alarcon-Segovia, Donato; Sredni, B.; Albeck, M.
CORPORATE SOURCE: Dep. Immunol. Rheumatol., Inst. Nac. Nutr. Salvador Zubiran, Mexico City, 14000, Mex.
SOURCE: Clinical and Experimental Immunology (1989), 77(3), 319-23
CODEN: CEXIAL; ISSN: 0009-9104
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The in vitro production of interleukin-2 (IL-2), the expression of IL-2 receptors, the absorption of IL-2, and spontaneously expanded suppressor cell function by mononuclear cells from 15 patients with systemic lupus erythematosus (SLE) and 15 healthy control subjects were studied. These functions were studied in the presence or absence of AS-101, a recently described organotellurium compound with immunoregulatory properties. AS-101 was non-toxic to cells from both patient and control groups; it increased the production of IL-2, elevated the percentage of Tac-pos. cells even among cells that had been pre-treated with Pronase, and ameliorated the absorption of IL-2. It also enhanced the suppressor cell function in cells from SLE patients. Since these functions are known to be defective in vitro in cells of SLE patients, and since preliminary testing of AS-101 in humans indicates that it is a safe drug, this immunoregulatory compound holds promise for a novel and effective treatment of SLE.
CC 1-7 (Pharmacology)
IT 106566-58-9
RL: BIOL (Biological study)
(immunosuppression by, in systemic lupus erythematosus in humans)

L84 ANSWER 55 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1989:107515 HCAPLUS Full-text
DOCUMENT NUMBER: 110:107515
ORIGINAL REFERENCE NO.: 110:17571a,17574a
TITLE: Determination of tellurium in biological fluids by means of electrothermal vaporization-inductively coupled plasma-mass spectrometry (ETV-ICP-MS)
AUTHOR(S): Newman, Robert A.; Osborn, Steven; Siddik, Zahid H.
CORPORATE SOURCE: M. D. Anderson Hosp., Univ. Texas, Houston, TX, 77030, USA
SOURCE: Clinica Chimica Acta (1989), 179(2), 191-6
CODEN: CCATAR; ISSN: 0009-8981
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The antitumor Te compound As-101 (ammonium trichloro[dioxoethylene-O,O']tellurate) was added to human plasma or urine and the levels of Te were determined by ETV-ICP-MS. The lower limits of detection in urine were 2.7 and 7.6 ng/mL and, in plasma, they were 5.7 and 10.3 ng/mL for isotopes 130 and 126, resp.
CC 1-1 (Pharmacology)
IT 106566-58-9, As 101
RL: BIOL (Biological study)
(tellurium determination as metabolite of, in human plasma or urine, by mass
spectrometry)

L84 ANSWER 56 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:542241 HCAPLUS Full-text
DOCUMENT NUMBER: 109:142241
ORIGINAL REFERENCE NO.: 109:23475a,23478a
TITLE: The biological activity and immunotherapeutic

properties of AS-101, a synthetic organotellurium compound
AUTHOR(S): Sredni, B.; Caspi, R. R.; Lustig, S.; Klein, A.; Kalechman, Y.; Danziger, Y.; BenYa'akov, M.; Tamari, T.; Shalit, F.; Albeck, M.
CORPORATE SOURCE: Dep. Life Sci., Bar-Ilan Univ., Ramat Gan, Israel
SOURCE: Natural Immunity and Cell Growth Regulation (1988), 7(3), 163-8
CODEN: NICRDR; ISSN: 0254-7600
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of AS-101 (ammonium trichloro[dioxoethylene-O,O'-]tellurate), a newly developed synthetic compound with immunomodulating properties and minimal toxicity, were evaluated on various parameters of the activation and function of immunocompetent cells. AS-101 induced interleukin-2 (IL-2) receptor expression, IL-2 production, and proliferation by human and mouse lymphocytes in vitro and enhanced the production of colony-stimulating factor (CSF) by mouse spleen cells. Treatment of mice with AS-101 increased the production of IL-2 and CSF ex vivo in the presence of mitogen. When administered systemically to mice, AS-101 mediated antitumor effects in vivo. Thus, AS-101 is an active biol. response modifier, which might have potential use in the treatment of conditions such as malignancy, AIDS, and some types of immune deficiency.
CC 1-7 (Pharmacology)
IT 106566-58-9, AS-101
RL: BIOL (Biological study)
(immunostimulation and neoplasm inhibition by, in humans and laboratory animals)

L84 ANSWER 57 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:447739 HCAPLUS Full-text
DOCUMENT NUMBER: 109:47739
ORIGINAL REFERENCE NO.: 109:7879a,7882a
TITLE: Use of platinum as a modifier in the sensitive detection of tellurium in biological samples
AUTHOR(S): Siddik, Z. H.; Newman, R. A.
CORPORATE SOURCE: Tumor Inst., M. D. Anderson Hosp., Houston, TX, 77030, USA
SOURCE: Analytical Biochemistry (1988), 172(1), 190-6
CODEN: ANBCA2; ISSN: 0003-2697
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Estimation of Te in biol. samples by flameless atomic absorption spectrophotometry is hindered by the high volatility of the metal. This necessitates the use of low ashing temps. which are inadequate to thoroughly ash the samples and thereby reduce interference due to smoke during the atomization stage. The use of Pt as a chemical modifier to thermally stabilize Te has, therefore, been explored. Thermal stability of Te was dependent on the concentration of Pt; maximum enhancement in stability was achieved at a Pt concentration of 10 μg/mL or greater, which allowed ashing temps. to be increased from 400 to 1300°. A 3-fold increase in the sensitivity for Te determination was also obtained in the presence of Pt. The thermal stability and the sensitivity, however, were susceptible to the presence of organic, inorg., and biol. matrixes. This procedure for the determination of Te, stabilized probably in the form of an amalgam with Pt, has been used successfully to estimate tissue levels of the metal following administration to mice of a novel Te-containing immunostimulant agent. Detection limits in urine, plasma, and tissues were about 50, 5, and 170 ng of Te/mL or g, resp.

CC 1-1 (Pharmacology)
IT 106566-58-9
RL: BIOL (Biological study)
(tellurium detection after administration of, in biol. samples, platinum in relation to)

L84 ANSWER 58 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1988:16001 HCAPLUS Full-text
DOCUMENT NUMBER: 108:16001
ORIGINAL REFERENCE NO.: 108:2589a,2592a
TITLE: A new immunomodulating compound (AS-101) with potential therapeutic application
AUTHOR(S): Sredni, B.; Caspi, R. R.; Klein, A.; Kalechman, Y.; Danziger, Y.; BenYa'akov, M.; Tamari, T.; Shalit, F.; Albeck, M.
CORPORATE SOURCE: Dep. Life Sci., Bar-Ilan Univ., Ramat-Gan, 52100, Israel
SOURCE: Nature (London, United Kingdom) (1987), 330(6144), 173-6
CODEN: NATUAS; ISSN: 0028-0836
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A synthetic compound, ammonium trichloro(dioxoethylene-O,O'-)tellurate (AS-101), which has immunomodulating properties and minimal toxicity, was developed. AS-101 induces proliferation and interleukin 2 (IL-2) production by human lymphocytes in vitro, and enhances the production of IL-2 and colony-stimulating factor (CSF) by mouse spleen cells. Splenocytes of BALB/c mice injected with AS-101 increased production of IL-2 and CSF in vitro in the presence of mitogen. Mononuclear cells of normal donors acquired responsiveness to recombinant IL-2 and bound monoclonal antibody to IL-2 receptor after incubation with AS-101. Splenocytes of mice treated in vivo with AS-101 expressed high levels of IL-2 receptor. The stimulation of lymphocytes by AS-101 apparently involves an increase in intracellular free Ca. AS-101 administered systemically to mice mediated antitumor effects which could be attributable to its immunomodulatory properties. In addition, AS-101 could directly enhance the ratio of OKT4 to OKT8-pos. cells in cultured mononuclear cells from AIDS.
CC 1-7 (Pharmacology)
IT 106566-58-9
RL: BIOL (Biological study)
(immunomodulation by)

L84 ANSWER 59 OF 59 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1987:61221 HCAPLUS Full-text
DOCUMENT NUMBER: 106:61221
ORIGINAL REFERENCE NO.: 106:9971a,9974a
TITLE: Compounds for the induction of in vivo and in vitro production of cytokines
INVENTOR(S): Albeck, Michael; Sredni, Benjamin
PATENT ASSIGNEE(S): Bar Ilan University, Israel
SOURCE: Eur. Pat. Appl., 55 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 194393	A2	19860917	EP 1985-402070	19851025 <--

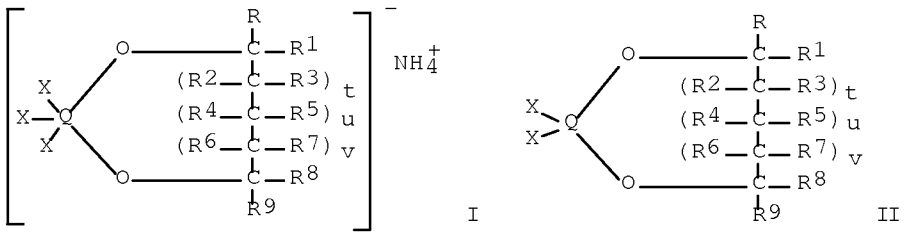
EP 194393	A3	19870902			
EP 194393	B1	19900613			
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE					
US 4761490	A	19880802	US 1985-782129	19850930	<--
DK 8504870	A	19860916	DK 1985-4870	19851023	<--
DK 168864	B1	19940627			
AT 53581	T	19900615	AT 1985-402070	19851025	<--
AU 8549128	A	19860918	AU 1985-49128	19851028	<--
AU 595487	B2	19900405			
IL 76909	A	19900712	IL 1985-76909	19851101	<--
CA 1327046	C	19940215	CA 1985-494658	19851105	<--
JP 61215386	A	19860925	JP 1985-250977	19851111	<--
JP 07091286	B	19951004			
ZA 8508797	A	19860924	ZA 1985-8797	19851115	<--
CN 86101696	A	19861224	CN 1986-101696	19860315	<--
CN 1018640	B	19921014			
US 4752614	A	19880621	US 1987-57799	19870603	<--
US 4764461	A	19880816	US 1987-57800	19870603	<--
US 5093135	A	19920303	US 1987-136396	19871222	<--
AU 9055022	A	19900913	AU 1990-55022	19900515	<--
AU 625922	B2	19920716			
US 5102908	A	19920407	US 1990-531887	19900601	<--
DK 9200098	A	19920127	DK 1992-98	19920127	<--
DK 168890	B1	19940704			
JP 07179351	A	19950718	JP 1994-186056	19940808	<--
JP 2528268	B2	19960828			

PRIORITY APPLN. INFO.:

US 1985-712549	A	19850315 <--
US 1985-782129	A	19850930 <--
US 1984-599511	A2	19840412 <--
EP 1985-402070		19851025 <--
US 1987-57799	A3	19870603 <--
US 1987-107131	A3	19871009 <--

OTHER SOURCE(S): CASREACT 106:61221; MARPAT 106:61221

GI



I II

AB Te and Se compds PhTeCl3, PhP+ [TeCl3(O2C2H4)]-, TeO2, I, and II [Q = Te, Se; t, u, v = 1, 0; R, R1-R9 = H, OH, halo, carboxy, (un)substituted alkyl, etc.; X = halogen] are synthesized which stimulate the in vivo and in vitro production of lymphokines and their receptors. II (Q = Te; t = u = v = 0; R = R1 = R8 = R9 = H; X = Cl) was synthesized by refluxing an equimolar mixture of ethylene glycol and TeCl4 in MeCN for 6 h. The solution was filtered, and the filtrate was allowed to cool to room temperature The white precipitate formed was collected and washed with cold MeCN. The product was injected i.p. into

Balb/c male mice. Spleen cells isolated 4-7 days after injection produced interleukin 2.

IC ICM C07D329-00
ICS C07D517-10; A61K031-33; A61K031-095; A61K031-66; A61K033-04

CC 1-7 (Pharmacology)
Section cross-reference(s): 15

IT 176-57-8P 6069-50-7P 106444-33-1P 106512-57-6P 106512-58-7P
106512-59-8P 106512-60-1P 106566-58-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as lymphokine inducer)

FILE 'HOME' ENTERED AT 14:51:57 ON 12 JUN 2009

SEARCH HISTORY

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=> d his nofile

     (FILE 'HOME' ENTERED AT 14:14:01 ON 12 JUN 2009)

     FILE 'CAPLUS' ENTERED AT 14:14:11 ON 12 JUN 2009
                E US2005-560232/APPS
                E US2006-560232/APPS
L1              1 SEA SPE=ON  ABB=ON  US2006-560232/AP
                D SCAN

     FILE 'REGISTRY' ENTERED AT 14:14:50 ON 12 JUN 2009
L2              1 SEA SPE=ON  ABB=ON  106566-58-9
                D SCAN

     FILE 'REGISTRY' ENTERED AT 14:19:47 ON 12 JUN 2009
                D IDE L2
L3              4 SEA SPE=ON  ABB=ON  77593-49-8/CRN
                D SCAN

     FILE 'HCAPLUS' ENTERED AT 14:20:56 ON 12 JUN 2009
L4             95 SEA SPE=ON  ABB=ON  L2
L5             97 SEA SPE=ON  ABB=ON  L3
L6              2 SEA SPE=ON  ABB=ON  L5 NOT L4
                D SCAN

     FILE 'CAPLUS' ENTERED AT 14:21:31 ON 12 JUN 2009
                D SCAN L1

     FILE 'HCAPLUS' ENTERED AT 14:21:31 ON 12 JUN 2009
L7              1 SEA SPE=ON  ABB=ON  US2006-560232/AP
                E OBESITY+ALL
                E OBESITY+ALL/CT
L8          41895 SEA SPE=ON  ABB=ON  OBESITY/CT
L9          48960 SEA SPE=ON  ABB=ON  ADIPOSE TISSUE/CT
L10         12208 SEA SPE=ON  ABB=ON  ANTIOBESITY AGENTS/CT
L11         21483 SEA SPE=ON  ABB=ON  APPETITE/CW
L12         35305 SEA SPE=ON  ABB=ON  BODY WEIGHT/CT
L*** DEL      128 S ADISOPITY OR CORPULEN?
L13          1627 SEA SPE=ON  ABB=ON  ADIPOSITY/OBI OR CORPULEN?/OBI
L14             1 SEA SPE=ON  ABB=ON  L4 AND (L8 OR L9 OR L10 OR L11 OR L12 OR
                  L13)
L15            61 SEA SPE=ON  ABB=ON  L4(L)(THU OR BAC OR PAC OR PKT OR DMA)/RL
L16            81 SEA SPE=ON  ABB=ON  L4 AND PHARMAC?/SC,SX
L17            88 SEA SPE=ON  ABB=ON  (L15 OR L16)
L18           814 SEA SPE=ON  ABB=ON  RUBINSTEIN M?/AU
L19            10 SEA SPE=ON  ABB=ON  DAGON Y?/AU
L20           129 SEA SPE=ON  ABB=ON  SREDNI B?/AU
L21           127 SEA SPE=ON  ABB=ON  ALBECK M?/AU
L22            80 SEA SPE=ON  ABB=ON  (L7 OR L18 OR L19 OR L20 OR L21) AND L5
L23             1 SEA SPE=ON  ABB=ON  (L7 OR L18 OR L19 OR L20 OR L21) AND L5
                  AND (L8 OR L9 OR L10 OR L11 OR L12 OR L13)

     FILE 'STNGUIDE' ENTERED AT 14:25:38 ON 12 JUN 2009
L24             0 SEA SPE=ON  ABB=ON  L5(L)(THU OR BAC OR PAC OR PKT OR DMA)/RL
                  OR (L5 AND PHARMAC?/SX,SC)

     FILE 'HCAPLUS' ENTERED AT 14:27:39 ON 12 JUN 2009
L25            89 SEA SPE=ON  ABB=ON  L5(L)(THU OR BAC OR PAC OR PKT OR DMA)/RL
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                OR (L5 AND PHARMAC?/SX,SC)
L26           26 SEA SPE=ON  ABB=ON  L25 AND PATENT/DT
L27            1 SEA SPE=ON  ABB=ON  L25 AND REVIEW/DT
L28           63 SEA SPE=ON  ABB=ON  L25 NOT L26
L29           48 SEA SPE=ON  ABB=ON  L28 AND PY<2004
L30           44 SEA SPE=ON  ABB=ON  L28 AND PY<2003
L31           15 SEA SPE=ON  ABB=ON  L26 AND (PD<20030612 OR PRD<20030612 OR
                AD<20030612)
L32           63 SEA SPE=ON  ABB=ON  (L31 OR L29 OR L27)
L33           59 SEA SPE=ON  ABB=ON  (L31 OR L30 OR L27)
L34            1 SEA SPE=ON  ABB=ON  L5 AND (L8 OR L9 OR L10 OR L11 OR L12 OR
                L13)

     FILE 'STNGUIDE' ENTERED AT 14:29:56 ON 12 JUN 2009

     FILE 'USPATFULL' ENTERED AT 14:31:16 ON 12 JUN 2009
L35           30 SEA SPE=ON  ABB=ON  L3
L36           69 SEA SPE=ON  ABB=ON  RUBINSTEIN M?/AU
L37            1 SEA SPE=ON  ABB=ON  DAGON Y?/AU
L38           27 SEA SPE=ON  ABB=ON  SREDNI B?/AU
L39           33 SEA SPE=ON  ABB=ON  ALBECK M?/AU
L40           25 SEA SPE=ON  ABB=ON  (L36 OR L37 OR L38 OR L39) AND L35
L41        35373 SEA SPE=ON  ABB=ON  OBES? OR ANTIOBES?
L42        15947 SEA SPE=ON  ABB=ON  APPETITE
L43        15534 SEA SPE=ON  ABB=ON  ADIPOS?
L44          332 SEA SPE=ON  ABB=ON  CORPULEN?
L45       148890 SEA SPE=ON  ABB=ON  (BODY OR CONTROL)(2A) WEIGHT
L46         6213 SEA SPE=ON  ABB=ON  OVERWEIGHT
L47           25 SEA SPE=ON  ABB=ON  L35 AND (L41 OR L42 OR L43 OR L44 OR L45
                OR L46)
L48           21 SEA SPE=ON  ABB=ON  L35 AND (L41 OR L42 OR L43 OR L44 OR L45
                OR L46) AND (L36 OR L37 OR L38 OR L39)

     FILE 'STNGUIDE' ENTERED AT 14:33:44 ON 12 JUN 2009

     FILE 'MEDLINE' ENTERED AT 14:34:02 ON 12 JUN 2009
L49            0 SEA SPE=ON  ABB=ON  L3
L50          111 SEA SPE=ON  ABB=ON  AS101 OR AS(W)101 OR OSSIRENE
L51        91302 SEA SPE=ON  ABB=ON  OBESITY+NT/CT
L52         1782 SEA SPE=ON  ABB=ON  ANTI-OBESITY AGENTS/CT
L53         3421 SEA SPE=ON  ABB=ON  APPETITE DEPRESSANTS/CT
L54       265223 SEA SPE=ON  ABB=ON  BODY WEIGHT+NT/CT
L55         4543 SEA SPE=ON  ABB=ON  APPETITE/CT
L56            2 SEA SPE=ON  ABB=ON  L50 AND (L51 OR L52 OR L53 OR L54 OR L55)

     FILE 'EMBASE' ENTERED AT 14:37:12 ON 12 JUN 2009
L57          124 SEA SPE=ON  ABB=ON  L3
L58          450 SEA SPE=ON  ABB=ON  RUBINSTEIN M?/AU
L59            7 SEA SPE=ON  ABB=ON  DAGON Y?/AU
L60          129 SEA SPE=ON  ABB=ON  SREDNI B?/AU
L61           77 SEA SPE=ON  ABB=ON  ALBECK M?/AU
L62           56 SEA SPE=ON  ABB=ON  (L58 OR L59 OR L60 OR L61) AND L57
                D TRIAL 1-5
                E OBESITY/CT
                E E3+ALL
L63       106808 SEA SPE=ON  ABB=ON  OBESITY+NT/CT
                E APPETITE+ALL/CT
L64         5830 SEA SPE=ON  ABB=ON  APPETITE/CT
                E WEIGHT GAIN/CT
                E E3+ALL
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L65       28614 SEA SPE=ON  ABB=ON  WEIGHT GAIN/CT
                E WEIGHT CONTROL/CT
                E E3+ALL
L66      167489 SEA SPE=ON  ABB=ON  BODY WEIGHT+NT/CT
                E ANTIOBES/CT
                E E7+ALL
L67        1324 SEA SPE=ON  ABB=ON  ANTIOBESITY AGENT/CT
                E APPETITE SUP/CT
                E E4+ALL
L68        1944 SEA SPE=ON  ABB=ON  ANOREXIGENIC AGENT/CT
L69           1 SEA SPE=ON  ABB=ON  L57 AND (L63 OR L64 OR L65 OR L66 OR L67
                OR L68)

     FILE 'STNGUIDE' ENTERED AT 14:40:49 ON 12 JUN 2009

     FILE 'DRUGU, BIOTECHNO, IPA, BIOSIS' ENTERED AT 14:42:59 ON 12 JUN 2009
L70         205 SEA SPE=ON  ABB=ON  L3
L71         216 SEA SPE=ON  ABB=ON  AS101 OR AS(W) 101 OR OSSIRENE
L72      125867 SEA SPE=ON  ABB=ON  OBES? OR ANTIOBES?
L73       20333 SEA SPE=ON  ABB=ON  APPETITE
L74      251660 SEA SPE=ON  ABB=ON  (WEIGHT(2A)(CONTROL OR BODY OR GAIN))
L75        1112 SEA SPE=ON  ABB=ON  ANOREXIGENIC#
L76       15199 SEA SPE=ON  ABB=ON  OVERWEIGHT
L77       60269 SEA SPE=ON  ABB=ON  ADIPOS?
L78         576 SEA SPE=ON  ABB=ON  CORPULEN?
L79           3 SEA SPE=ON  ABB=ON  (L70 OR L71) AND (L72 OR L73 OR L74 OR L75
                OR L76 OR L77 OR L78)

     FILE 'STNGUIDE' ENTERED AT 14:43:43 ON 12 JUN 2009

     FILE 'CAPLUS' ENTERED AT 14:44:28 ON 12 JUN 2009
                D QUE L23

     FILE 'USPATFULL' ENTERED AT 14:44:29 ON 12 JUN 2009
                D QUE L48

     FILE 'HCAPLUS, USPATFULL' ENTERED AT 14:44:38 ON 12 JUN 2009
L80           22 DUP REM L23 L48 (0 DUPLICATES REMOVED)
                     ANSWER '1' FROM FILE HCAPLUS
                     ANSWERS '2-22' FROM FILE USPATFULL
                D IBIB ABS HITIND 1
                D IBIB ABS KWIC 2-22

     FILE 'STNGUIDE' ENTERED AT 14:45:27 ON 12 JUN 2009

     FILE 'REGISTRY' ENTERED AT 14:47:14 ON 12 JUN 2009
L81           1 SEA SPE=ON  ABB=ON  77593-50-1
                D IDE

     FILE 'CAPLUS' ENTERED AT 14:47:48 ON 12 JUN 2009
                D QUE L34

     FILE 'HCAPLUS' ENTERED AT 14:48:07 ON 12 JUN 2009
                D QUE L34
                D SCAN TI L34

     FILE 'USPATFULL' ENTERED AT 14:48:20 ON 12 JUN 2009
                D QUE L47
L82           4 SEA SPE=ON  ABB=ON  L47 NOT L48
                D IBIB ABS KWIC 1-4
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     FILE 'MEDLINE' ENTERED AT 14:49:16 ON 12 JUN 2009
                D QUE L56

     FILE 'EMBASE' ENTERED AT 14:49:29 ON 12 JUN 2009
                D QUE L69

     FILE 'DRUGU, BIOTECHNO, IPA, BIOSIS' ENTERED AT 14:49:49 ON 12 JUN 2009
                D QUE L79

     FILE 'MEDLINE, DRUGU, BIOSIS, EMBASE' ENTERED AT 14:49:49 ON 12 JUN 2009
L83             4 DUP REM L56 L79 L69 (2 DUPLICATES REMOVED)
                       ANSWERS '1-2' FROM FILE MEDLINE
                       ANSWER '3' FROM FILE DRUGU
                       ANSWER '4' FROM FILE BIOSIS
                D IALL 1-4

     FILE 'HOME' ENTERED AT 14:49:58 ON 12 JUN 2009
                D COST

     FILE 'CAPLUS' ENTERED AT 14:51:09 ON 12 JUN 2009
                D QUE NOS L33

     FILE 'HCAPLUS' ENTERED AT 14:51:31 ON 12 JUN 2009
                D QUE NOS L33
L84            59 SEA SPE=ON  ABB=ON  L33 NOT (L23 OR L34)
                D IBIB ABS HITIND L84 1-59

     FILE 'HOME' ENTERED AT 14:51:57 ON 12 JUN 2009

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